Federal Emergency Management Agency

Washington, D.C. 20472

APR 1 6 2004

RECEIVED
MAY 1 4 2004

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The Honorable Martin J. Chavez
Mayor, City of Albuquerque
Office of the Mayor
P.O. Box 1293
Albuquerque, NM 87103

Follows Conditional Case No.: 02-06-2430R
IN REPLY REFER TO:
Case Number: **04-06-039P**
Community Name: City of Albuquerque,
Bernalillo County, New Mexico
Community Number: 350002
Effective Date of
this Revision: APR 1 6 2004

Dear Mayor Chavez:

The Flood Insurance Rate Map (FIRM) for your community has been revised by this Letter of Map Revision (LOMR). Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals issued in your community.

Additional documents are enclosed that provide information regarding this LOMR. Please see the List of Enclosures below to determine which documents are included. Other attachments specific to this request may be included as referenced in the Determination Document. If you have any questions regarding floodplain management regulations for your community or the National Flood Insurance Program (NFIP) in general, please contact the Consultation Coordination Officer (CCO) for your community. If you have any technical questions regarding this LOMR, please contact the Director, Federal Insurance and Mitigation Division of the Federal Emergency Management Agency (FEMA) in Denton, Texas, at (940) 898-5165, or the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our web site at http://www.fema.gov/nfip.

Sincerely,

Kevin C. Long

Kevin C. Long, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

For: Doug Bellomo, P.E., CFM, Acting Chief
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

List of Enclosures:
Letter of Map Revision Determination Document
Annotated Flood Insurance Rate Map
List of Current Flood Insurance Study Data

cc: Tom Rutherford, Commissioner, Bernalillo County
Brian Kent, P.E., Floodplain Administrator, Bernalillo County
Bradley Bingham, P.E., CFM, Floodplain Administrator, City of Albuquerque
James D. Hughes, P.E., D. Mark Goodwin & Associates, PA
Community Map Repository, City of Albuquerque

 | Issue Date: April 16, 2004 | Effective Date: April 16, 2004 | Case No.: 04-06-039P | LOMR-APP

Follows Conditional Case No.: 02-06-2430R

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO	CULVERT	BASE MAP CHANGES HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS NATURAL CHANGES NEW TOPOGRAPHIC DATA
	COMMUNITY NO.: 350002		
IDENTIFIER	THE LA CUEVA ARROYO AND THE EL CAMINO ARROYO	APPROXIMATE LATITUDE & LONGITUDE: 35.183, -106.558 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
FLOODING SOURCES & REVISED REACHES	UNNAMED PONDING AREA – an area bounded by Beverly Hills Avenue NE to the north, San Pedro Drive NE to the east, Florence Avenue NE to the south, and Interstate 25 to the west UNNAMED PONDING AREA – an area bounded by Louisiana Boulevard NE to the east, Glendale Avenue NE to the south, and Interstate 25 to the west		

SUMMARY OF REVISIONS

tive Flooding:	Zone A	Zone A
sed Flooding:	Zone AO	BFEs*
Increases:	YES	YES
Decreases:	YES	NONE

* BFEs - Base Flood Elevations

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO: 35001C0129 F Date: November 19, 2003	NO REVISION TO THE FLOOD INSURANCE STUDY

* FIRM - Flood Insurance Rate Map

DETERMINATION

This document provides the determination from the Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

Kevin C. Long

Kevin C. Long, CFM, Project Engineer
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LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO	CULVERT	BASE MAP CHANGES HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS NATURAL CHANGES NEW TOPOGRAPHIC DATA
	COMMUNITY NO.: 350002		
IDENTIFIER	THE LA CUEVA ARROYO AND THE EL CAMINO ARROYO	APPROXIMATE LATITUDE & LONGITUDE: 35.183, -106.558 SOURCE: USGS QUADRANGLE DATUM: NAD 83	

FLOODING SOURCES & REVISED REACHES	UNNAMED PONDING AREA – an area bounded by Louisiana Boulevard NE to the east, Glendale Avenue NE to the south, and San Pedro NE to the west

SUMMARY OF REVISIONS

ctive Flooding: Zone AO
'sed Flooding: Zone AO
...creases: YES
Decreases: YES

* BFEs - Base Flood Elevations

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO: 35001C0129 F Date: November 19, 2003	NO REVISION TO THE FLOOD INSURANCE STUDY

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LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO	CULVERT	BASE MAP CHANGES HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS NATURAL CHANGES NEW TOPOGRAPHIC DATA
	COMMUNITY NO.: 350002		
IDENTIFIER	THE LA CUEVA ARROYO AND THE EL CAMINO ARROYO	APPROXIMATE LATITUDE & LONGITUDE: 35.183, -106.558 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
FLOODING SOURCES & REVISED REACHES	UNNAMED PONDING AREA – an area bounded by Elena Drive NE to the north, Wyoming Boulevard NE to the east, Florence Avenue NE to the south, and San Pedro Drive NE to the west		

SUMMARY OF REVISIONS

ctive Flooding:	Zone AO	BFEs*
Revised Flooding:	Zone AO	BFEs*
Increases:	YES	YES
Decreases:	YES	NONE

* BFEs - Base Flood Elevations

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO: 35001C0129 F Date: November 19, 2003 NO: 35001C0133 F Date: November 19, 2003	NO REVISION TO THE FLOOD INSURANCE STUDY

* FIRM - Flood Insurance Rate Map

DETERMINATION

This document provides the determination from the Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

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LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO	CULVERT DETENTION BASIN	BASE MAP CHANGES HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS NATURAL CHANGES NEW TOPOGRAPHIC DATA
	COMMUNITY NO.: 350002		
IDENTIFIER	THE LA CUEVA ARROYO AND THE EL CAMINO ARROYO	APPROXIMATE LATITUDE & LONGITUDE: 35.183, -106.558 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
FLOODING SOURCE & REVISED REACH	UNNAMED PONDING AREA – an area bounded by Florence Avenue NE to the north, Glendale Avenue NE to the south, and Wyoming Boulevard NE to the west		

SUMMARY OF REVISIONS

tive Flooding:	Zone AO	BFEs*
Revised Flooding:	Zone AH	BFEs*
Increases:	YES	YES
Decreases:	YES	NONE

* BFEs - Base Flood Elevations

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO: 35001C0133 F Date: November 19, 2003	NO REVISION TO THE FLOOD INSURANCE STUDY

* FIRM - Flood Insurance Rate Map

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LETTER OF MAP REVISION DETERMINATION DOCUMENT (continued)

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO COMMUNITY NO.: 350002	CHANNELIZATION CHANNEL RELOCATION CULVERT	BASE MAP CHANGES HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS NATURAL CHANGES NEW TOPOGRAPHIC DATA
IDENTIFIER	THE LA CUEVA ARROYO AND THE EL CAMINO ARROYO	APPROXIMATE LATITUDE & LONGITUDE: 35.183, -106.558 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
FLOODING SOURCE & REVISED REACH	NORTH LA CUEVA ARROYO – from just upstream of Interstate 25 to approximately 100 feet downstream of Wyoming Boulevard		

SUMMARY OF REVISIONS

ctive Flooding: Zone A
Revised Flooding: Zone A
Increases: YES
Decreases: YES

* BFEs - Base Flood Elevations

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO: 35001C0129 F Date: November 19, 2003 NO: 35001C0133 F Date: November 19, 2003 NO: 35001C0141 F Date: November 19, 2003	NO REVISION TO THE FLOOD INSURANCE STUDY

* FIRM - Flood Insurance Rate Map

DETERMINATION

This document provides the determination from the Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

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LETTER OF MAP REVISION DETERMINATION DOCUMENT (continued)

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO	CHANNELIZATION CHANNEL RELOCATION CULVERT	BASE MAP CHANGES HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS NATURAL CHANGES NEW TOPOGRAPHIC DATA
	COMMUNITY NO.: 350002		
IDENTIFIER	THE LA CUEVA ARROYO AND THE EL CAMINO ARROYO	APPROXIMATE LATITUDE & LONGITUDE: 35.183, -106.558 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
FLOODING SOURCE & REVISED REACH	SOUTH EL CAMINO DIVERSION – from just upstream of Interstate 25 to approximately 500 feet upstream of San Pedro Drive NE		

SUMMARY OF REVISIONS

ctive Flooding:	Zone A	X (unshaded)
Revised Flooding:	Zone A	X (unshaded)
Increases:	NONE	YES
Decreases:	YES	NONE

* BFEs - Base Flood Elevations

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO: 35001C0129 F Date: November 19, 2003	NO REVISION TO THE FLOOD INSURANCE STUDY

* FIRM - Flood Insurance Rate Map

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LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

OTHER COMMUNITIES AFFECTED BY THIS REVISION

CID Number: 350001 **Name:** BERNALILLO COUNTY, NEW MEXICO (UNINCORPORATED AREAS

AFFECTED MAP PANELS	AFFECTED PORTIONS of the FLOOD INSURANCE STUDY
TYPE: FIRM NO: 35001C0129 F Date: November 19, 2003 NO: 35001C0133 F Date: November 19, 2003 NO: 35001C0141 F Date: November 19, 2003	NO REVISION TO THE FLOOD INSURANCE STUDY

CID Number: **Name:**

AFFECTED MAP PANELS	AFFECTED PORTIONS of the FLOOD INSURANCE STUDY

CID Number: **Name:**

AFFECTED MAP PANELS	AFFECTED PORTIONS of the FLOOD INSURANCE STUDY

CID Number: **Name:**

AFFECTED MAP PANELS	AFFECTED PORTIONS of the FLOOD INSURANCE STUDY

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

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LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

NFIP regulations Subparagraph 60.3(b)(7) requires communities to ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management ordinances; therefore, responsibility for maintenance of the modified channel and culvert rests with your community. We may request that your community submit a description and schedule of channel and culvert activities.

COMMUNITY REMINDERS

based this determination on the 1% annual chance discharges computed in the submitted hydrologic model. Future development of projects upstream could cause increased discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on discharges and could, therefore, indicate that greater flood hazards exist in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State law have been obtained. State or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

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LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION (CONTINUED)

We have enclosed a document, titled *List of Current Flood Insurance Study Data*, which includes this letter, to help your community maintain all information for floodplain management and flood insurance. If any of the items in that document are not filed in your community's map repository, please contact the FEMA Map Assistance Center at the number listed below for information on how to obtain those items.

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Mr. Frank Pagano
Director, Federal Insurance and Mitigation Division
Federal Emergency Management Agency, Region VI
Federal Regional Center, Room 206
800 North Loop 288
Denton, Texas 76209-3698
(940) 898-5127

ATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panels warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

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LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

PUBLIC NOTIFICATION OF REVISION

Within 90 days of the second publication in the local newspaper, a citizen may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. This revision is effective as of the date of this letter. However, until the 90-day period elapses, the revised BFEs presented in this LOMR may be changed.

This information will be published in the *Federal Register* and your local newspaper as detailed below.

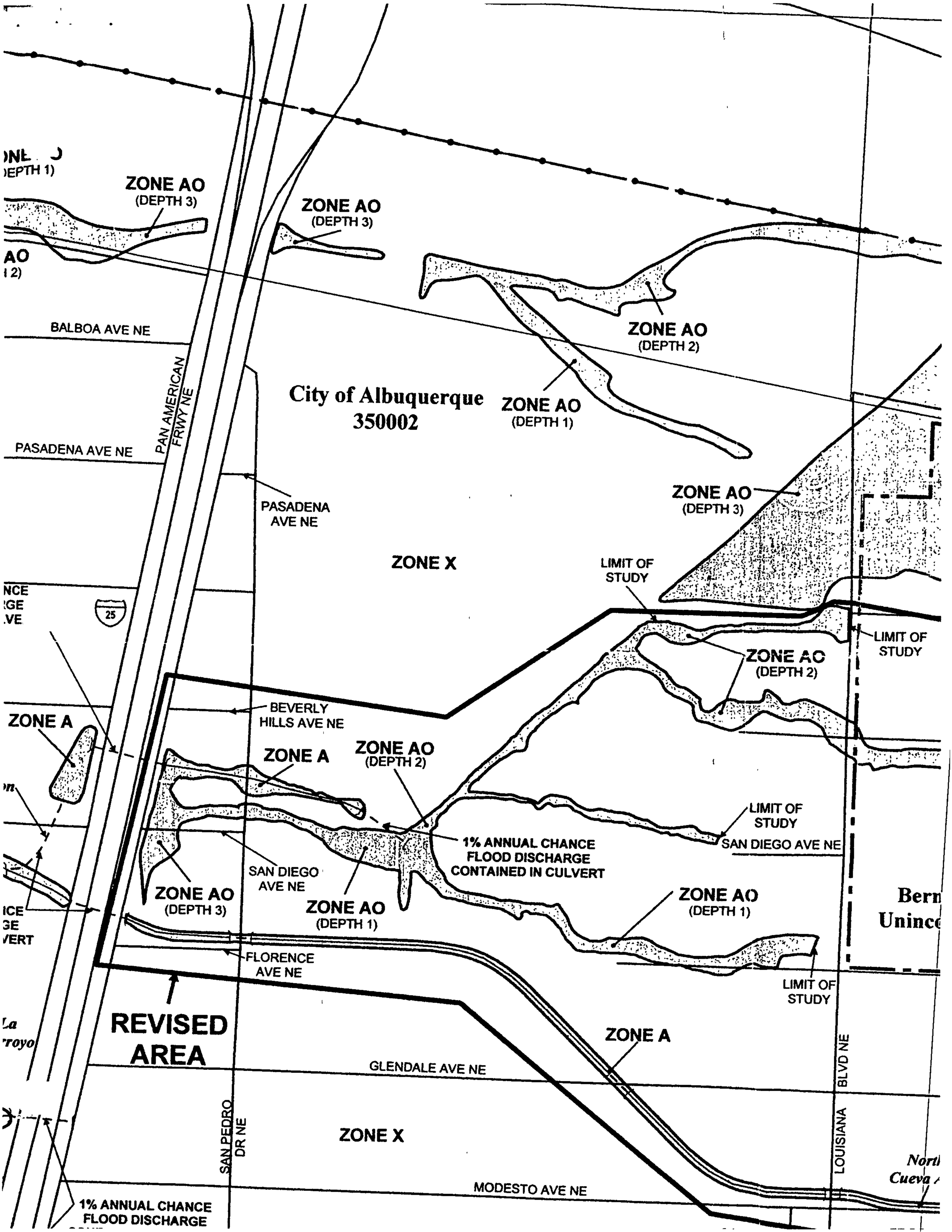
LOCAL NEWSPAPER Name: *The Albuquerque Journal*
Dates: 04/30/2004 05/07/2004

PUBLIC NOTIFICATION				
FLOODING SOURCE	LOCATION OF REFERENCED ELEVATION	BFE (FEET NAVD) EFFECTIVE	BFE (FEET NAVD) REVISED	MAP PANEL NUMBERS
UNNAMED PONDING AREA	An area bounded by Beverly Hills Avenue NE to the north, San Pedro Drive NE to the east, Florence Avenue NE to the south, and Interstate 25 to the west	None	Depth of 3 feet	35001C0129 F and 35001C0133 F
UNNAMED PONDING AREA	An area bounded by Louisiana Boulevard NE to the east, Glendale Avenue NE to the south, and Interstate 25 to the west	None	Depth of 1 foot	
UNNAMED PONDING AREA	An area bounded by Elena Drive NE to the north, Wyoming Boulevard NE to the east, Florence Avenue NE to the south, and San Pedro Drive NE to the west	Depth of 1 foot	Depth of 2 feet	35001C0129 F
UNNAMED PONDING AREA	An area bounded by San Diego Avenue NE to the north, Wyoming Boulevard NE to the east, Florence Avenue NE to the south, and Louisiana Boulevard NE to the west	Depth of 1 foot	Depth of 2 feet	35001C0129 F and 35001C0133 F
UNNAMED ZONE AH PONDING AREA	An area bounded by Florence Avenue NE to the north, Glendale Avenue NE to the south, and Wyoming Boulevard NE to the west	Depth of 1 foot	5,392 feet	35001C0133 F

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

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ZONE AO
(DEPTH 3)
ZONE AO
(DEPTH 3)
ZONE AO
(DEPTH 2)
ZONE AO
(DEPTH 1)
ZONE AO
(DEPTH 3)
BALBOA AVE NE
PAN AMERICAN FRWY NE
City of Albuquerque
350002
PASADENA AVE NE
PASADENA AVE NE
ZONE X
LIMIT OF STUDY
LIMIT OF STUDY
ZONE AO
(DEPTH 2)
25
BEVERLY HILLS AVE NE
ZONE A
ZONE A
ZONE AO
(DEPTH 2)
LIMIT OF STUDY
1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT
SAN DIEGO AVE NE
SAN DIEGO AVE NE
ZONE AO
(DEPTH 3)
ZONE AO
(DEPTH 1)
ZONE AO
(DEPTH 1)
FLORENCE AVE NE
LIMIT OF STUDY
REVISED AREA
ZONE A
GLENDALE AVE NE
BLVD NE
SAN PEDRO DR NE
ZONE X
LOUISIANA
MODESTO AVE NE
1% ANNUAL CHANCE FLOOD DISCHARGE

APPROXIMATE SCALE IN FEET

500 0 500

NFIP

PANEL 0129F

FIRM

FLOOD INSURANCE RATE MAP

BERNALILLO COUNTY, NEW MEXICO
AND INCORPORATED AREAS

PANEL 129 OF 825
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ALBUQUERQUE, CITY OF	350002	0129	F
BERNALILLO COUNTY, UNINCORPORATED AREAS	350001	0129	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
35001C0129F

MAP REVISED:
NOVEMBER 19, 2003

REVISED TO REFLECT LOMR DATED APR 16 2004

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

ZONE AO
(DEPTH 1)

ZONE AO
(DEPTH 3)

ZONE AO
(DEPTH 2)

ZONE AO
(DEPTH 3)

BALBOA AVE NE

PAN AMERICAN FRWY NE

City of Albuquerque
350002

ZONE
(DEPT

PASADENA AVE NE

PASADENA AVE NE

SAN MATEO BLVD NE

VENICE AVE NE

1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT

25

ZONE X

BEVERLY HILLS AVE NE

BEVERLY HILLS AVE NE

ZONE A

ZONE A

South El Camino Diversion

SAN DIEGO AVE NE

ZONE A

ZONE AO
(DEPTH 2)

City of Albuquerque
350002

PASADENA AVE NE

PAN AMERI
FRWY NE

PASADENA
AVE NE

ZONE X

SAN MATEO BLVD NE

VENICE AVE NE

1% ANNUAL CHANCE
FLOOD DISCHARGE
CONTAINED IN CULVERT

25

BEVERLY HILLS AVE NE

BEVERLY
HILLS AVE NE

ZONE A

ZONE A

ZONE AO
(DEPTH 2)

South El Camino Diversion

SAN DIEGO AVE NE

North La Cuerva Arroyo

1% ANNUAL CHANCE
FLOOD DISCHARGE
CONTAINED IN CULVERT

ZONE AO
(DEPTH 3)

SAN DIEGO
AVE NE

ZONE AO
(DEPTH 1)

FLORENCE
AVE NE

REVISED
AREA

APPROXIMATE SCALE IN FEET

500 0 500

South La
Cuerva Arroyo

ZONE
A

GLENDALE AVE NE

SAN PEDRO
DR NE

ZONE X

1% ANNUAL CHANCE
FLOOD DISCHARGE
CONTAINED IN CULVERT

MODESTO

ZONE AO
(DEPTH 1)

NFIP

PANEL 0133F

FIRM

FLOOD INSURANCE RATE MAP

BERNALILLO COUNTY,
NEW MEXICO
AND INCORPORATED AREAS

PANEL 133 OF 825
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ALBUQUERQUE, CITY OF	350002	0133	F
BERNALILLO COUNTY	350001	0133	F

Notice to User: The Map Number shown below should be used when placing map orders, the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
35001C0133F

MAP REVISED:
NOVEMBER 19, 2003

REVISED TO REFLECT LOMR
EFFECTIVE DATE APR 16 2004

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

ZONE X

ELENA DR NE

ELENA DR NE

AMRAAM CT NE

VENICE AVE NE

VE NE

NE AO
EPTH 1)

ZONE X

SAN DIEGO
AVE NE

ZONE AO
(DEPTH 2)

LIMIT OF
STUDY

FLORENCE AVE NE

35001C0129E

35001C0133F

ZONE AH
(EL 5392)

GLENDALE AVE NE

ZONE AO
(DEPTH 1)

E X

1% ANNUAL CHANCE
FLOOD DISCHARGE
CONTAINED IN CULVERT

WYOMING
BLVD NE

MODESTO AVE NE

R C GORMAN AVE NE

WALTER
BAMBROOK
PL NE

WILSON HURLEY ST NE

35001C0133F

35001C0141F

MORRIS RIPPEL
PL NE

ZONE A

LA CUEVA CHANNEL NE

OAKLAND AVE NE

GEORGIA
O KEEFFE
DR NE

ZONE X

WYOMING
BLVD NE

DORIS STEIDER ST NE

PETER HURD
ST NE

WILLIAM MOYER

N

APPROXIMATE SCALE IN FEET

500 0 500

NFIP

PANEL 0141F

FIRM

FLOOD INSURANCE RATE MAP

BERNALILLO COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 141 OF 825
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ALBUQUERQUE, CITY OF	350002	0141	F
BERNALILLO COUNTY	350001	0141	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community

MAP NUMBER
35001C0141F

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE PROGRAM

REVISED TO REFLECT LOMR

MAP REVISED:

CHANGES ARE MADE IN DETERMINATIONS OF BASE FLOOD ELEVATIONS FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, UNDER THE NATIONAL FLOOD INSURANCE PROGRAM

On November 19, 2003, the Department of Homeland Security's Federal Emergency Management Agency identified Special Flood Hazard Areas (SFHAs) in Bernalillo County, New Mexico and Incorporated Areas, which includes the City of Albuquerque, through issuance of a Flood Insurance Rate Map (FIRM). The Mitigation Division has determined that modification of the elevations of the flood having a 1% chance of being equaled or exceeded in any given year (base or 100-year flood) for certain locations in this community is appropriate. The modified Base Flood Elevations (BFEs) revise the FIRM for the community.

The changes are being made pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65.

Hydrologic and hydraulic analyses were performed to incorporate the channelization of the North La Cueva Arroyo and the construction of a sediment pond and diversion pipe on the El Camino Arroyo and has resulted in reductions and increases in SFHA, and increased stillwater elevations for portions of the unnamed ponding areas. The aforementioned channelized portion of the North La Cueva Arroyo contains the flood having a 1-percent chance of being equaled or exceeded in any given year. The table below indicates existing and modified BFEs for selected locations along the affected lengths of the flooding sources cited above.

Location	Existing BFE (feet)*	Modified BFE (feet)*
Unnamed Ponding Area An area bounded by Beverly Hills Avenue NE to the north, San Pedro Drive NE to the east, Florence Avenue NE to the south, and Interstate 25 to the west	None	Depth of 3 feet
Unnamed Ponding Area An area bounded by Louisiana Boulevard NE to the east, Glendale Avenue NE to the south, and Interstate 25 to the west	None	Depth of 1 foot
Unnamed Ponding Area An area bounded by Elena Drive NE to the north, Wyoming Boulevard NE to the east, Florence Avenue NE to the south, and San Pedro Drive NE to the west	Depth of 1 foot	Depth of 2 feet

*North American Vertical Datum, rounded to nearest whole foot

Location	Existing BFE (feet)*	Modified BFE (feet)*
Unnamed Ponding Area An area bounded by Beverly Hills Avenue NE to the north, San Pedro Drive NE to the east, Florence Avenue NE to the south, and Interstate 25 to the west	Depth of 1 foot	Depth of 2 feet
Unnamed Zone AH Ponding Area An area bounded by Louisiana Boulevard NE to the east, Glendale Avenue NE to the south, and Interstate 25 to the west	Depth of 1 foot	5,392 feet

*North American Vertical Datum, rounded to nearest whole foot

Under the above-mentioned Acts of 1968 and 1973, the Mitigation Division must develop criteria for floodplain management. For the community to participate in the National Flood Insurance Program (NFIP), the community must use the modified BFEs to administer the floodplain management measures of the NFIP. These modified BFEs will also be used to calculate the appropriate flood insurance premium rates for new buildings and their contents and for the second layer of insurance on existing buildings and contents.

Upon the second publication of notice of these changes in this newspaper, any person has 90 days in which he or she can request, through the Chief Executive Officer of the community, that the Mitigation Division reconsider the determination. Any request for reconsideration must be based on knowledge of changed conditions or new scientific or technical data. All interested parties are on notice that until the 90-day period elapses, the Mitigation Division's determination to modify the BFEs may itself be changed.

Any person having knowledge or wishing to comment on these changes should immediately notify:

The Honorable Martin J. Chavez
Mayor, City of Albuquerque
Office of the Mayor
P.O. Box 1293
Albuquerque, NM 87103

Or

Tom Rutherford
Commissioner, Bernalillo County
One Civic Plaza, NW 10th Floor
Albuquerque, NM 87102

LIST OF CURRENT FLOOD INSURANCE STUDY DATA

This list is provided to document all information currently effective for your community for insurance and floodplain management.

Date: APR 1 6 2004

Community: City of Albuquerque, Bernalillo County, New Mexico

Community Number: 350002

CURRENT EFFECTIVE FLOOD INSURANCE STUDY DATE: November 19, 2003

FLOOD INSURANCE RATE MAP

Map Index 35001CIND0	Effective Date November 19, 2003
Panel Numbers 0092 E, 0094 E, 0100 E, 0103 E, 0104 E, 0108 E, 0111 E, 0112 E, 0113 E, 0114 E, 0118 E, 0119 E, 0138 E, 0139 E, 0143 E, 0307 E, 0309 E, 0317 E, 0319 E, 0326 E, 0327 E, 0328 E, 0329 E, 0331 E, 0332 E, 0333 E, 0334 E, 0336 E, 0337 E, 0338 E, 0339 E, 0341 E, 0342 E, 0344 E, 0351 E, 0352 E, 0353 E, 0354 E, 0356 E, 0357 E, 0361 E, 0362 E, 0363 E, 0364 E, 0366 E, 0376 E, 0378 E, 0527 E, 0531 E, 0533 E, 0535 E, and 0555 E	Effective Date November 19, 2003
Panel Numbers 0109 F, 0116 F, 0128 F, 0129 F, 0133 F, 0136 F, 0137 F, 0141 F, 0142 F, 0144 F, 0161 F, 0163 F, 0358 F, 0359 F, 0367 F, and 0386 F	Effective Date November 19, 2003

LETTERS OF MAP REVISION

Panel Numbers	Effective Date
0129 F	APR 1 6 2004
0133 F	APR 1 6 2004
0137 F	November 20, 2003 December 16, 2003

LETTERS OF MAP REVISION *(continued)*

Panel Numbers	Effective Date
0141 F	APR 1 6 2004
0161 F	December 9, 2003
309 E	November 20, 2003
0327 E	November 20, 2003
0328 E	November 20, 2003 January 27, 2004
0329 E	January 27, 2004 March 3, 2004
0336 E	January 27, 2004
0337 E	January 27, 2004
0367 E	December 16, 2003

LETTERS OF MAP AMENDMENT AND MAP REVISION BASED ON FILL

Panel Numbers	Effective Date
0119 E	February 25, 2004
0133 F	March 3, 2004
0331 E	March 3, 2004
0353 E	March 3, 2004
0359 F	January 7, 2004
0354 E	January 7, 2004

BEST AVAILABLE DATA LETTERS

None

Tim Eichenberg, Chair
Linda Stover, Vice-Chair /
Asst Secretary-Treasurer
Ronald D Brown, Secretary-Treasurer
Daniel Hernandez, Director
Daniel Lyon, Director

John P Kelly, PE
Executive Engineer

Albuquerque
Metropolitan
Arroyo
Flood
Control
Authority

2600 PROSPECT N E - ALBUQUERQUE, NM 87107
TELEPHONE (505) 884-2215 FAX (505) 884-0214

163

January 8, 2004

Mr. James Urisko
Federal Emergency Management Agency
C/O PBS & J
12101 Indian Creek Court
Beltsville, MD 20705

Re: LOMR Case # 04-06-039P
Construction Plans for the La Cueva Arroyo, I-25 East to Eagle Rock Avenue and the El Camino Arroyo Diversion Storm Drain

Dear Mr. Urisko:

The purpose of this letter is to provide documentation in accordance with paragraph 65.6(a)(12) of the "National Flood Insurance Program Regulations" that the Albuquerque Metropolitan Arroyo Flood Control Authority has agreed to maintain the improvements that provide protection from or mitigate potential hazards of the base flood within the altered and relocated portions of the above referenced watercourse.

Please see our attached Operations, Maintenance and Inspection Policies. Our facilities are inspected annually and after every runoff event, with maintenance work determined from such inspections.

Please call me with any further questions or comments at (505) 884-2215.

Sincerely,
AMAFCA

John Kelly, P.E.
Executive Engineer

cc: James D. Hughes, PE, Mark Goodwin & Associates
Brad Bingham, City of Albuquerque, Flood Plain Administrator

Albuquerque Metropolitan Arroyo Flood Control Authority

PROJECT INSPECTIONS

Plan No.2,
June 1999

1. **Definitions:**

A. Inspection. Examination of an Authority facility to ensure its proper operation and to identify needed maintenance and repairs.

2. **Procedures**

A. Intervals

1. A detailed, formal inspection of each Authority facility will be made at least once per year, normally in the spring before flood season. This inspection will be accomplished using a check list (See Inspection Guides and Checklist file). Certain facilities (e.g., NDC and SDC) require more frequent inspections.

2. An inspection will be conducted after each major sto rm event which affects a flood control facility, with the primary objective being to identify immediate measures needed to restore the facility's ability to function as designed.

3. An informal inspection of each facility will be conducted, normally in the fall. The formal checklist is not required, but written record may be made.

4. Principal spillway conduits at Dams will be inspected via remote camera ever four years. Conduits will be visually inspected during each annual inspection from the ends with lights. Physical inspection will be done if needed, in accordance with confined space entry procedures.

5. Dam crests will be surveyed for settlement every four years. Mylar drawings will be updated with the elevation information, with copies furnished to the New Mexico State Engineer Office.

1. Records

1. Formal checklists will be completed, reviewed by the Chief Engineer and Executive Director, and filed in the project's OMI folder.

2. Sheet G-2 (required Maintenance Repairs) will be duplicated, with a copy of

the Maintenance Superintendent, to serve as a work directive.

3. Results of informal inspections will be reported by informal notes, or in briefings to the Chief Engineer.

4. The Chief Engineer is responsible for developing inspection schedules.

5. Progress on inspections will be reported monthly to the Executive Director.

3. As a matter of professional courtesy, and when convenient, AMAFCA personnel will informally inspect drainage facilities owned by other public agencies, and advise them of problems.

Adopted: Date: 6-1-99

John P. Kelly
Chief Engineer

Albuquerque Metropolitan Arroyo Flood Control Authority

PROJECT MAINTENANCE

Plan No.2,
June 1999

1. **Definition**: Maintenance is defined as all measures taken to ensure that each facility will operate as intended by design, and includes repairs, improvements, and all measures taken to assure that public welfare and safety are protected.

2. **General:**

Maintenance and repairs will be accomplished by the most expeditious and cost-effective means. Both in-house forces and contractors may be used.

A. Priority of effort will be:

1. Correction of problems which could lead to failure and subsequent loss of life or major property damage (e.g., concrete channel repairs, blockages of outlets and channels).

2. Installation or repair of features to protect public safety (e.g., guardrails, traffic barriers, reflectors, delineators).

3. Repairs which are necessary to prevent deterioration to a condition which could lead to failure (e.g., serious erosion, gabion repairs).

4. Work to maintain stormwater capacity (e.g., sediment, vegetation, and trash removal).

5. Routine maintenance (e.g., normal erosion, replacement or riprap, concrete joint repairs).

6. Minor/esthetic maintenance (e.g., minor sediment graffiti).

3. Guidelines for allocation of effort:

A. In-house crew

1. Emergencies

2. Safety - installation of new safety features; maintenance and upgrade of existing

3. Inspection

4. Concrete repair, except large jobs

5. Jobs for which crew has experience, (e.g., silt removal in sensitive locations (Alameda Outlet Structure, NDC)

6. Routine and repetitive tasks

7. Short duration jobs (2 or less weeks duration)

B. Contractors

1. Production jobs, (e.g., larger dirt or silt moving)

2. Specialized tasks for which we lack in-house expertise and/or equipment

3. Appropriate backlog tasks which cannot be scheduled in a timely manner by Maintenance Crew

C. Other

1. Contractors and others may remove sediment from AMAFCA facilities, in accordance with Resolution 1991-10. Permits may be issued by the Business Manager after appropriate approval by other the Executive Director , Chief Engineer, and/or Maintenance Superintendent.

4. Administration and Records

A. The Chief Engineer and Maintenance Superintendent will develop annual and monthly maintenance (including safety) schedules.

B. Insofar as possible, records of maintenance work (written, photographic, costs) will be kept in each project OMI folder.

C. Chief Engineer and Maintenance Superintendent will brief Executive Director monthly on accomplishments, schedule(s), safety, and other matters of interest.

Adopted: John P Kelly Date: 6-1-99

John P. Kelly
Chief Engineer

Albuquerque Metropolitan Arroyo Flood Control Authority

PROJECT OPERATIONS

Plan No.2,
June, 1999

1. Definitions:

A. **Operations**
Within the context of "Operations, Maintenance, and Inspection", Operations is defined as the functioning of a flood control facility during or immediately after a storm. It includes the opening/closing of gates. valves, outlet works (if the facility has them) and may also involve hasty or emergency measures, if necessary to ensure proper functioning of the facility.

B. **Emergency Operations**
See Emergency Operations Plan No. 4, dated November, 1998.

2. General: During rainstorms, AMAFCA personnel, as needed or directed, will observe and monitor flood control facilities to ensure their proper operation.

3. Specific Instructions:

A. As weather conditions dictate, AMAFCA personnel will travel to affected areas or flood control facilities, with radio-equipped vehicles. This procedure will be in effect during both on and off duty hours.

B. Through communications, facilities affected will be identified, and closely monitored for proper operation and safety. Additional Authority forces will be called out, as required.

C. Photographs will be taken, where possible.

D. Flow or detention dam stages (depths) and times will be recorded.

E. Notes of project operation characteristics will be made, particularly where unusual conditions may be noted.

F. If necessary, assist police and rescue forces, as needed in opening gates, giving location instructions, etc. AMAFCA employees will not attempt rescue of victims in channels.

G. Following storms, project OMI folders will be updated with information gathered during the operation and any remedial actions immediately planned and executed.

H. After a facility has functioned from stormwater, at the first opportunity, a detailed inspection will be made by an Authority engineer. Use of checklist is recommended.

4. Preparatory Instructions:

A. Before each flood season, the following will be accomplished:

1. Stock adequate supplies of film (Maintenance Superintendent)

2. Ensure vehicles, radios, lights, etc., are in good condition (Maintenance Superintendent).

3. Repaint, as needed, depth gauges (Maintenance Superintendent)

4. Ensure all gates, valves, outlet works function properly, and keep wheels and cranks property stored (Chief Engineer, Maintenance Superintendent).

5. Keep cameras, flashlights, spray paint, rescue equipment available in vehicles (Chief Engineer, Maintenance Superintendent).

B. During the flood season, the following applies:

1. Vacations and absences will be limited and controlled. (All, especially field personnel).

2. A daily assessment of storm potential will be made, and plans for response discussed (Chief Engineer, Maintenance Superintendent).

3. Maintenance Superintendent will take home a radio-equipped Authority vehicle.

4. Continuous inspections of Authority flood control facilities will be made. Secondary, incidental inspections may be made of facilities owner/operated by other to ensure complementary safe operation.

Adopted: Date: 6-9-99

John P. Kelly
Chief Engineer

NATIONAL FLOOD INSURANCE PROGRAM
FEMA MAP COORDINATION CONTRACTOR

OCT 28 2003

Carlos A. Montoya
Floodplain Administrator
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

IN REPLY REFER TO:
Case No.: 04-06-039P
Community: Bernalillo County, New Mexico (Unincorporated Areas), and City of Albuquerque, Bernalillo County, New Mexico
Community No.: 350001 and 350002

316-ACK.FRQ

Dear Mr. Montoya:

This responds to your request, dated October 6, 2003, that the Federal Emergency Management Agency (FEMA) issue a revision to the Flood Insurance Rate Map (FIRM) for the above-referenced communities. Pertinent information about the request is listed below.

Identifier:	Construction plans for the La Cueva Arroyo I-25 East to Eagle Rock Ave. and the El Camino Arroyo Diversion Storm Drain
Flooding Source:	The La Cueva Arroyo and the El Camino Arroyo
FIRM Panels Affected:	Bernalillo County, New Mexico and Incorporated Areas FIRM, number 35001C, panles 0129 E, 0133 E, and 0141 E, all dated April 2, 2002

We have completed an inventory of the items that you submitted. The items identified below are required before we can begin a detailed review of your request.

1. Please submit documentation of individual legal notices that were sent to property owners who are adversely impacted by any increases in and/or shifting of the 1% annual chance (100-year) floodplain for the North La Cueva Arroyo and the El Camino Arroyo.

   a. If you submit notification and acceptance from the adversely impacted property owners, FEMA can issue a Letter of Map Revision (LOMR) effective the date of issuance.

   b. If you submit notification of, but not acceptance by, the adversely impacted property owners, FEMA may issue a LOMR effective three to six months after the date of issuance.

2. To ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained, FEMA requires a maintenance agreement for channel and culvert improvement projects. Please submit a maintenance agreement for this project in accordance with Subparagraph 65.6(a)(12) of the National Flood Insurance Program (NFIP) regulations. Ensure that the maintenance agreement states who will be responsible for the maintenance and that the community will assume the maintenance duties if need be.

Please send the required data to us at the address shown at the bottom of the first page. If all required items are not submitted within 90 days of the date of this letter, FEMA will treat any subsequent request as an original submittal, and it will be subject to all submittal/payment procedures as outlined in Paragraph 72.7(a) of the NFIP regulations (44 CFR Parts 59-78).

If you are unable to meet the 90-day deadline for submittal of required items and would like FEMA to continue processing your request, you must request an extension of the deadline. This request must be submitted to us in writing and must provide (1) the reason why the data cannot be submitted within the requested timeframe and (2) a new date for the submittal of the data. FEMA receives a very large volume of requests and cannot maintain inactive requests for an indefinite period of time. Therefore, the fees will be forfeited for any request for which neither the requested data nor a written extension request is received within 90 days.

When you write to us about your request, please include the case number referenced above in your letter. If you have general questions about your case, FEMA policy, or the NFIP, please call FEMA's toll free map assistance line at 1-877-FEMA MAP (1-877-336-2627). If you have specific questions concerning your request, please contact the Engineer assigned to your case, Mr. James Urisko, by phone at 1-800-697-7275 Ext. 788, or by e-mail at jurisko@pbsj.com.

Sincerely,

Joseph A. Martinenza, Jr.
Program Manager, Region VI

Enclosure

cc: James D. Hughes, P.E., D. Mark Goodwin & Associates, PA

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 6, 2003

Joseph A. Martinenza
PBS&J
12101 Indian Creek Court
Beltsville, Maryland 20705

RE: Request for a Letter of Map Revision for La Cueva and El Camino Arroyos
City of Albuquerque, New Mexico, Community No. 350002, FIRM Panel 35001C0129E, and 0133E, 0141E Effective Date April 2, 2002

Dear Mr. Martinenza,

The purpose of this submittal is to convey the documents in order to request a Letter of Map Revision based on as-built drawing for the construction of a channel, storm drain, and a detention pond to revise the 100-year floodplain.

Enclosed with this letter are the Construction Drawings, pictures, annotated floodplain maps, and a check in the amount of $3,800.00.

As the City Floodplain Administrator, I have reviewed the response provided with this submittal. Our Community would greatly appreciate your prompt response and approval for this Letter of Map Revision.
If you have any questions, you can contact me at (505) 924-3982.

Sincerely,

Carlos A. Montoya
City/County Floodplain Administrator

C: Bill Blanton, Federal Emergency Management Agency Headquarters
Jack Quarles, FEMA Region VI
James D. Hughes, Mark Goodwin and Associates
Jerry Lavato, AMAFCA
Brian Kent, Bernalillo County Floodplain Administrator

THE CITY OF ALBUQUERQUE IS AN EQUAL OPPORTUNITY/REASONABLE ACCOMMODATION EMPLOYER

CONTENTS

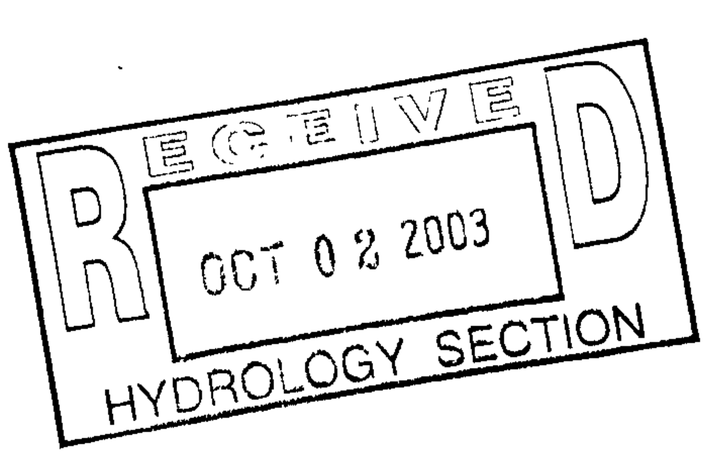
1. *Form*

2. *Explanation of Request*

3. *As-built Plans*

4. *Work Maps (Color)*
   (From Volumes I & II of CLOMR)

5. *Maps of old flood plain now being changed*
   (Pages 299-302 from Volume I of CLOMR)



An Explanation of Request

1. *General Overview*

The construction of "The La Cueva Arroyo and the El Camino Arroyo Diversion Case No. 02-06-2430R is to complete so this request is for FEMA to Issue a Letter of Map Revision (LOMR) thus changing the official flood plain to that approved with the Conditional Letter of Map Revision (CLOMR).

All hydraulic structures were constructed to within 0.2 foot of the originally planned elevations so the hydraulic models were not revised and are not included in this package. (See separate request for CLOMR for all hydrology and hydraulic analysis.)

The outfall control structure on the sediment pond at the headworks for the El Camino Diversion was changed (See sheet BL7-2.1 of the construction plans). No new analysis is being offered since improved function seems evident.

The as-built plans are the main evidence supporting this request. Also see the letter of acceptance and pictures of the completed facilities.

2. *Form 2 - "Riverine Hydrology & Hydraulics Form"*

   A. *Hydrology*
   There are no boxes checked because there was no new analysis being submitted. (See CLOMR analysis.)
   B. *Hydraulics*
   There are no boxes checked because there was no new analysis being submitted. (See CLOMR analysis.)
   C. *The same map and plans that were submitted with the CLOMR are being submitted with this LOMR, except that the plans have actual as-built information on them. Note that the datum of the topographic work map is not the same as the datum of the plans. Both the plans and the hydraulic calculations are on NAD 1927. There are not any flood plain elevations associated with the Topographic work map in the re-mapped offsite flood plains. Only relative depth were used at the re-mapped offsite flood plains.*

3. *FORM 3 - Riverine Structures Form*

This form is not included because all of the explanations of the structures' hydraulic adequacy were included in the CLOMR. (See that separate submittal for details.)

4. *Form 4 - Coastal Analysis Form*

This form is not applicable because there is no coast involved.

5. *Form 5 - Coastal Structures Form*

This form is not applicable because there is no coast involved.

6. *Form 6 - Alluvial Fan Flooding Form*

This form is not applicable because no Alluvial fans are involved.

FEDERAL EMERGENCY MANAGEMENT AGENCY

OVERVIEW & CONCURRENCE FORM

O.M.B No. 3067-0148
Expires September 30, 2005

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 1 hour per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, SW, Washington DC 20472, Paperwork Reduction Project (3067-0148). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

A. REQUESTED RESPONSE FROM FEMA

This request is for a (check one):

☐ CLOMR: A letter from FEMA commenting on whether a proposed project, if built as proposed, would justify a map revision, or proposed hydrology changes (See 44 CFR Ch. 1, Parts 60, 65 & 72).

☒ LOMR: A letter from FEMA officially revising the current NFIP map to show the changes to floodplains, regulatory floodway or flood elevations. (See Parts 60 & 65 of the NFIP Regulations.)

B. OVERVIEW

1. The NFIP map panel(s) affected for all impacted communities is (are):

Community No.	Community Name	State	Map No	Panel No.	Effective Date
Ex: 480301 480287	City of Katy Harris County	TX TX	480301 48201C	0005D 0220G	02/08/83 09/28/90
350002	Albuquerque City	NM		129, 133 & 141	09/11/98
50001	Bernalillo County	Nm			09/11/98

2. Flooding Source: The La Cueva Arroyo and the El Camino Arroyo

3. Project Name/Identifier: Construction plans for the La Cueva Arroyo I-25 East to Eagle Rock Ave. and the El Camino Arroyo Diversion Storm Drain

4. FEMA zone designations affected: A, AO, and X (choices: A, AH, AO, A1-A30, A99, AE, AR, V, V1-V30, VE, B, C, D, X)

5. Basis for Request and Type of Revision:

a. The basis for this revision request is (check all that apply)

☒ Physical Change ☐ Improved Methodology/Data

☐ Regulatory Floodway Revision ☐ Other (Attach Description)

Note: A photograph and narrative description of the area of concern is not required, but is very helpful during review.

b. The area of revision encompasses the following types of flooding and structures (check all that apply)

Types of Flooding:	☒ Riverine	☐ Coastal	☒ Shallow Flooding (e g., Zones AO and AH)
	☐ Alluvial fan	☒ Lakes	☐ Other (Attach Description)
Structures:	☒ Channelization	☐ Levee/Floodwall	☒ Bridge/Culvert
	☒ Dam	☐ Fill	☐ Other, Attach Description

C. REVIEW FEE

Has the review fee for the appropriate request category been included? ☒ Yes Fee amount: $3800.00

☐ No, Attach Explanation

Please see the FEMA Web site at http.//www.fema.gov/mit/tsd/frm_fees.htm **for Fee Amounts and Exemptions.**

D. SIGNATURE

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: James D. Hughes, PE	Company: Mark Goodwin & Associates	
Mailing Address: P.O. Box 90606 Albuquerque, NM 87199	Daytime Telephone No.: (505) 828-2200	Fax No.: (505) 797-9539
	E-Mail Address: dmg@swcp.com	
Signature of Requester (required): James D. Hughes		Date: 9-24-03

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision (LOMR) or conditional LOMR request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirement that no fill be placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a conditional LOMR, will be obtained. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by FEMA, all analyses and documentation used to make this determination.

Community Official's Name and Title:		Telephone No.:
Community Name:	Community Official's Signature (required):	Date:

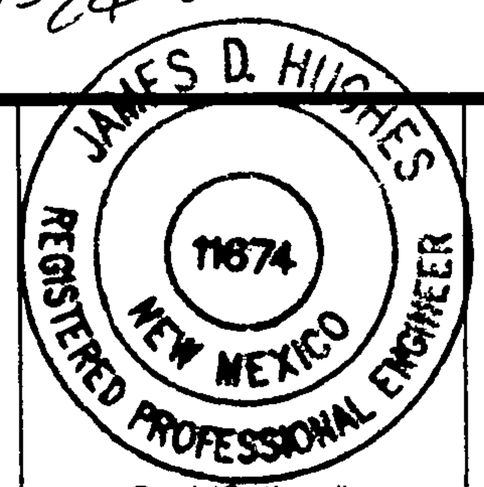
CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information. All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: James D. Hughes, PE	License No.: 11674 New Mexico	Expiration Date: 12/31/04
Company Name: Mark Goodwin & Associates	Telephone No : (505) 828-2200	Fax No . (505) 797-9539
Signature: James D. Hughes		Date: 9-24-03

Ensure the forms that are appropriate to your revision request are included in your submittal.

Form Name and (Number)	Required if ...
☒ Riverine Hydrology and Hydraulics Form (Form 2)	New or revised discharges or water-surface elevations
☐ Riverine Structures Form (Form 3)	Channel is modified, addition/revision of bridge/culverts, addition/revision of levee/floodwall, addition/revision of dam
☐ Coastal Analysis Form (Form 4)	New or revised coastal elevations
☐ Coastal Structures Form (Form 5)	Addition/revision of coastal structure
☐ Alluvial Fan Flooding Form (Form 6)	Flood control measures on alluvial fans



Seal (Optional)

FEDERAL EMERGENCY MANAGEMENT AGENCY

RIVERINE HYDROLOGY & HYDRAULICS FORM

O.M.B No. 3067-0148
Expires September 30, 2005

PAPERWORK REDUCTION ACT

Public reporting burden for this form is estimated to average 3 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, SW, Washington DC 20472, Paperwork Reduction Project (3067-0148). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

Flooding Source: La Cueva and El Camino Arroyos
Note: Fill out one form for each flooding source studied

A. HYDROLOGY N/A

1. Reason for New Hydrologic Analysis (check all that apply)

☐ Not revised (skip to section 2) ☐ No existing analysis ☐ Improved data
☐ Alternative methodology ☐ Proposed Conditions (CLOMR) ☐ Changed physical condition of watershed

2. Comparison of Representative 1%-Annual-Chance Discharges

Location	Drainage Area (Sq. Mi.)	FIS (cfs)	Revised (cfs)

3. Methodology for New Hydrologic Analysis (check all that apply)

☐ Statistical Analysis of Gage Records ☐ Precipitation/Runoff Model [TR-20, HEC-1, HEC-HMS etc.]
☐ Regional Regression Equations ☐ Other (please attach description)

Please enclose all relevant models in digital format, maps, computations (including computation of parameters) and documentation to support the new analysis. The document, "Numerical Models Accepted by FEMA for NFIP Usage" lists the models accepted by FEMA. This document can be found at: http://www fema.gov/mit/tsd/en_modl.htm.

4. Review/Approval of Analysis

If your community requires a regional, state, or federal agency to review the hydrologic analysis, please attach evidence of approval/review.

5. Impacts of Sediment Transport on Hydrology

Was sediment transport considered? ☐ Yes ☐ No If yes, then fill out Section F (Sediment Transport) of Form 3. If No, then attach your explanation for why sediment transport was not considered.

B. HYDRAULICS N/A

1. Reach to be Revised

	Description	Cross Section	Water-Surface Elevations (ft.) Effective	Proposed/Revised
Downstream Limit				
Upstream Limit				

2. Hydraulic Method Used

Hydraulic Analysis [HEC-2 , HEC-RAS, Other (Attach description)]

B. HYDRAULICS (CONTINUED)

3. Pre-Submittal Review of Hydraulic Models

FEMA has developed two review programs, CHECK-2 and CHECK-RAS, to aid in the review of HEC-2 and HEC-RAS hydraulic models, respectively. These review programs verify that the hydraulic estimates and assumptions in the model data are in accordance with NFIP requirements, and that the data are comparable with the assumptions and limitations of HEC-2/HEC-RAS. CHECK-2 and CHECK-RAS identify areas of potential error or concern. These tools do not replace engineering judgment. CHECK-2 and CHECK-RAS can be downloaded from http://www.fema.gov/mit/tsd/frm_soft.htm. We recommend that you review your HEC-2 and HEC-RAS models with CHECK-2 and CHECK-RAS. If you disagree with a message, please attach an explanation of why the message is not valid in this case. Review of your submittal and resolution of valid modeling discrepancies will result in reduced review time.

HEC-2/HEC-RAS models reviewed with CHECK-2/CHECK-RAS? ☐ Yes ☐ No

4. Models Submitted

Duplicate Effective Model*	Natural File Name:	Floodway File Name:
Corrected Effective Model*	Natural File Name:	Floodway File Name:
Existing or Pre-Project Conditions Model	Natural File Name:	Floodway File Name:
Revised or Post-Project Conditions Model	Natural File Name:	Floodway File Name:
Other - (attach description)	Natural File Name:	Floodway File Name:

*Not required for revisions to approximate 1%-annual-chance floodplains (Zone A) – for details, refer to the corresponding section of the instructions.

The document "Numerical Models Accepted by FEMA for NFIP Usage" lists the models accepted by FEMA. This document can be found at: http://www.fema.gov/mit/tsd/en_modl.htm.

C. MAPPING REQUIREMENTS

A **certified topographic map** must be submitted showing the following information (where applicable): the boundaries of the effective, existing, and proposed conditions 1%-annual-chance floodplain (for approximate Zone A revisions) or the boundaries of the 1%- and 0.2%-annual-chance floodplains and regulatory floodway (for detailed Zone AE, AO, and AH revisions); location and alignment of all cross sections with stationing control indicated; stream, road, and other alignments (e.g., dams, levees, etc.); current community easements and boundaries; boundaries of the requester's property; certification of a registered professional engineer registered in the subject State; location and description of reference marks; and the referenced vertical datum (NGVD, NAVD, etc.).

Note that the boundaries of the existing or proposed conditions floodplains and regulatory floodway to be shown on the revised FIRM and/or FBFM must tie-in with the effective floodplain and regulatory floodway boundaries. Please attach **a copy of the effective FIRM and/or FBFM,** annotated to show the boundaries of the revised 1%- and 0.2%-annual-chance floodplains and regulatory floodway that tie-in with the boundaries of the effective 1%- and 0.2%-annual-chance floodplain and regulatory floodway at the upstream and downstream limits of the area of revision.

D. COMMON REGULATORY REQUIREMENTS

1. For CLOMR requests, do Base Flood Elevations (BFEs) increase? N/A ☐ Yes ☐ No

For CLOMR requests, if either of the following is true, please submit evidence of compliance with Section 65.12 of the NFIP regulations:
- The proposed project encroaches upon a regulatory floodway and would result in increases above 0.00 foot.
- The proposed project encroaches upon a SFHA with BFEs established and would result in increases above 1.00 foot.

2. Does the request involve the placement or proposed placement of fill? ☒ Yes ☐ No

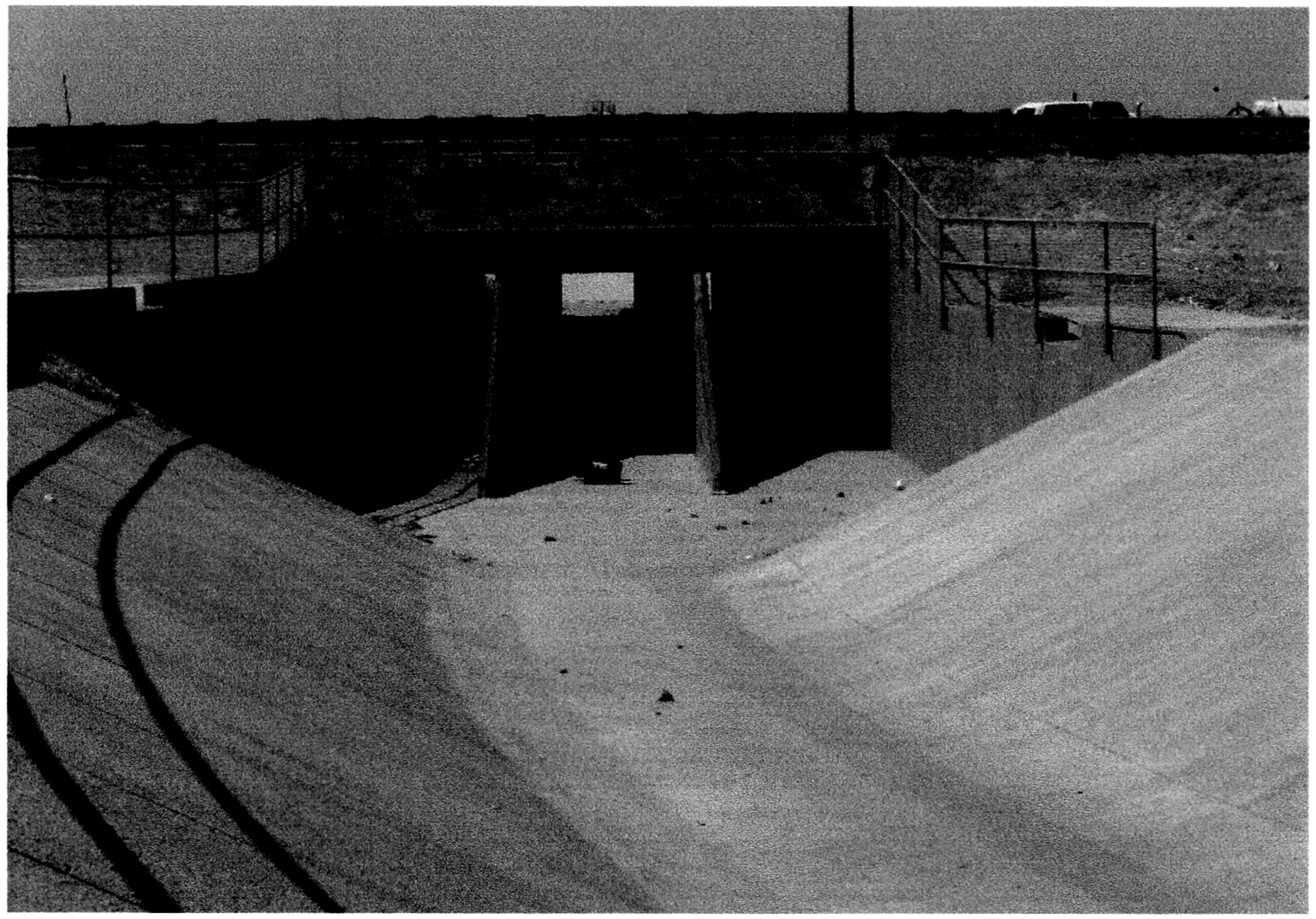
If Yes, the community must be able to certify that the area to be removed from the special flood hazard area, to include any structures or proposed structures, meets all of the standards of the local floodplain ordinances, and is reasonably safe from flooding in accordance with the NFIP regulations set forth at 44 CFR 60.3(a)(3), 65.5(a)(4), and 65.6(a)(14). Please see the MT-2 instructions for more information.

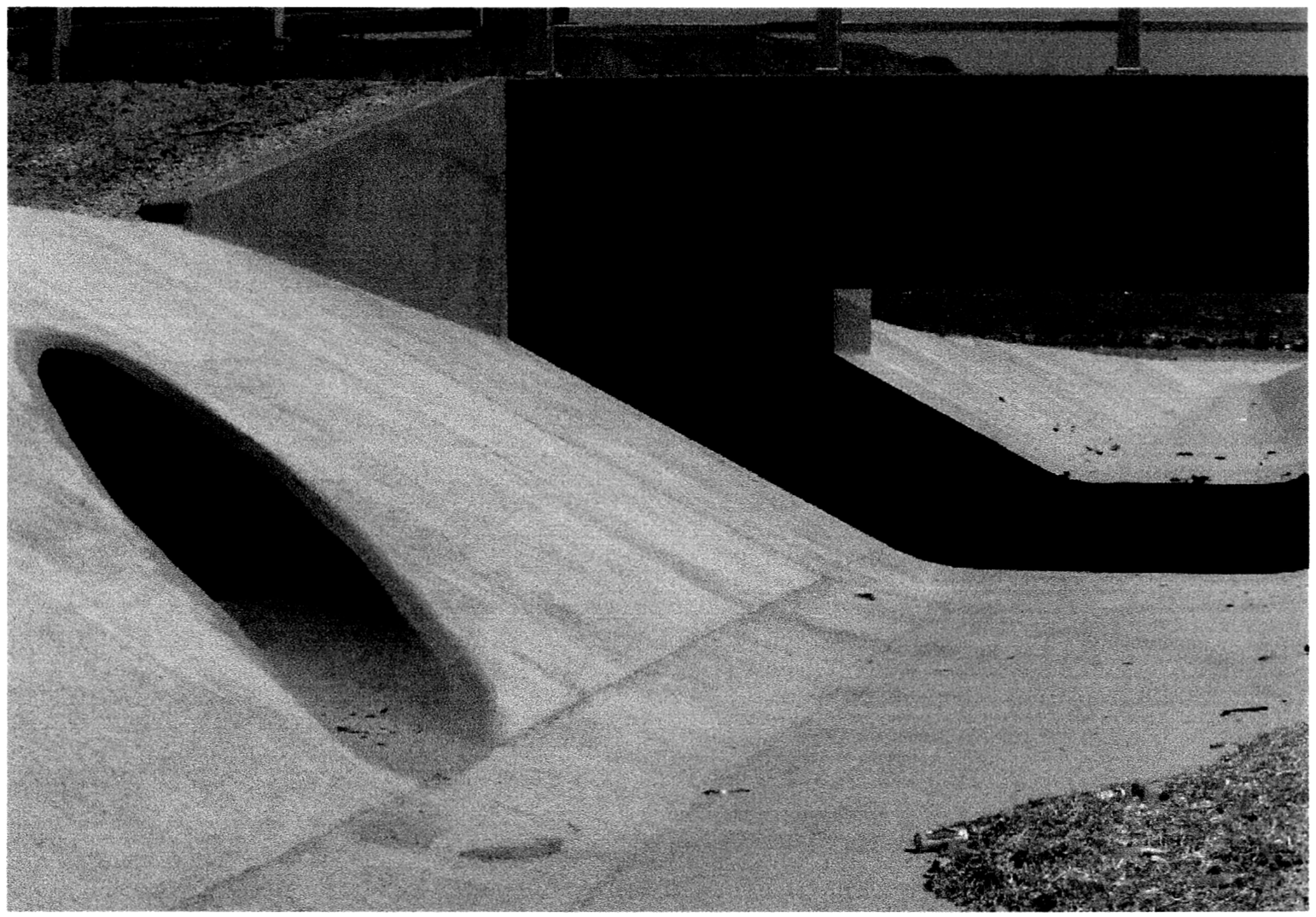
3. For LOMR requests, is the regulatory floodway being revised? ☐ Yes ☒ No

If Yes, attach evidence of regulatory floodway revision notification. As per Paragraph 65.7(b)(1) of the NFIP Regulations, notification is required for requests involving revisions to the regulatory floodway. (Not required for revisions to approximate 1%-annual-chance floodplains [studied Zone A designation] unless a regulatory floodway is being added. Elements and examples of regulatory floodway revision notification can be found in the MT-2 Form 2 Instructions.)

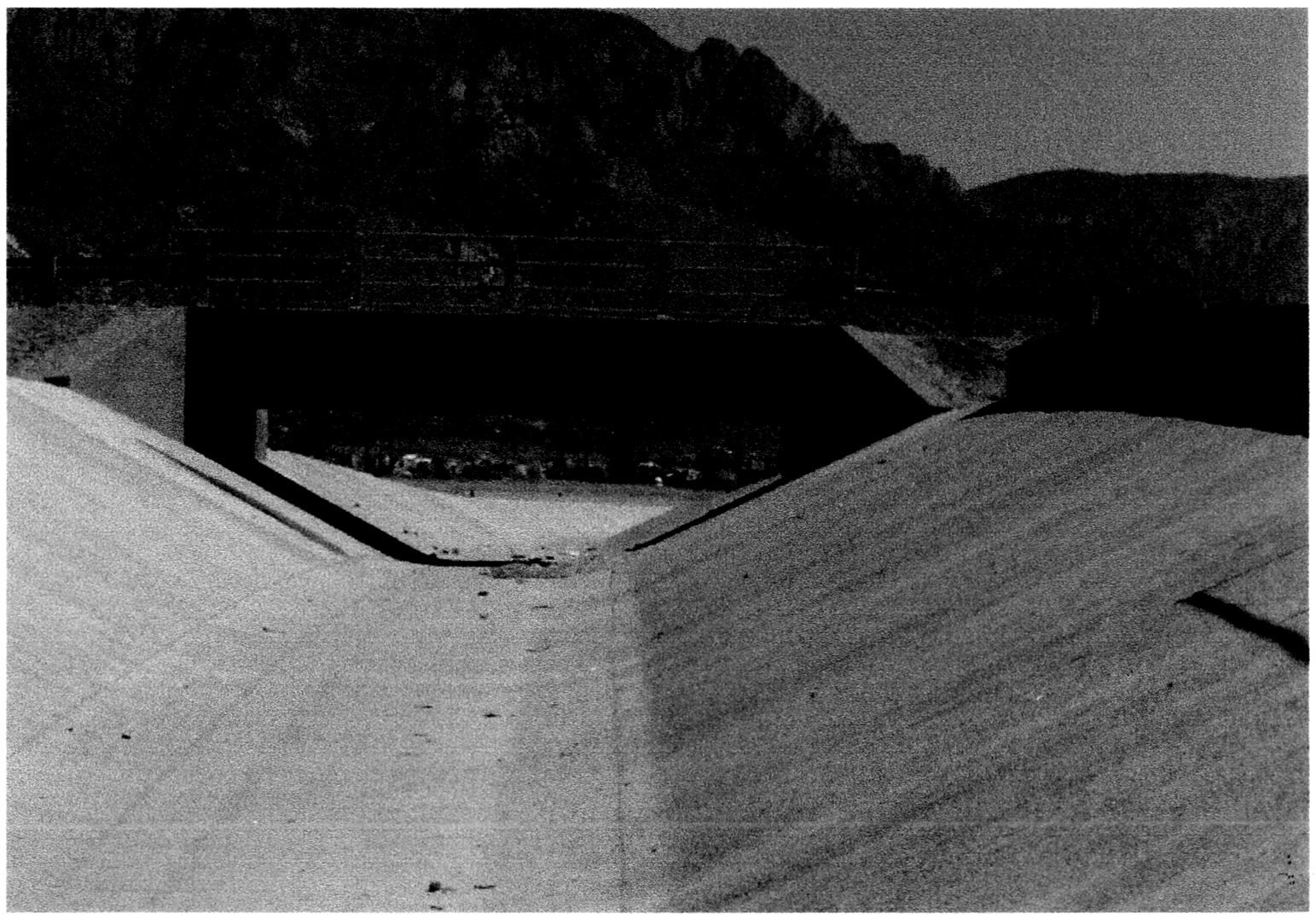
4. For LOMR requests, does this request require property owner notification and acceptance of BFE increases? ☒ Yes ☐ No

If Yes, please attach proof of property owner notification and acceptance (if available). Elements of and examples of property owner notification can be found in the MT-2 Form 2 Instructions.





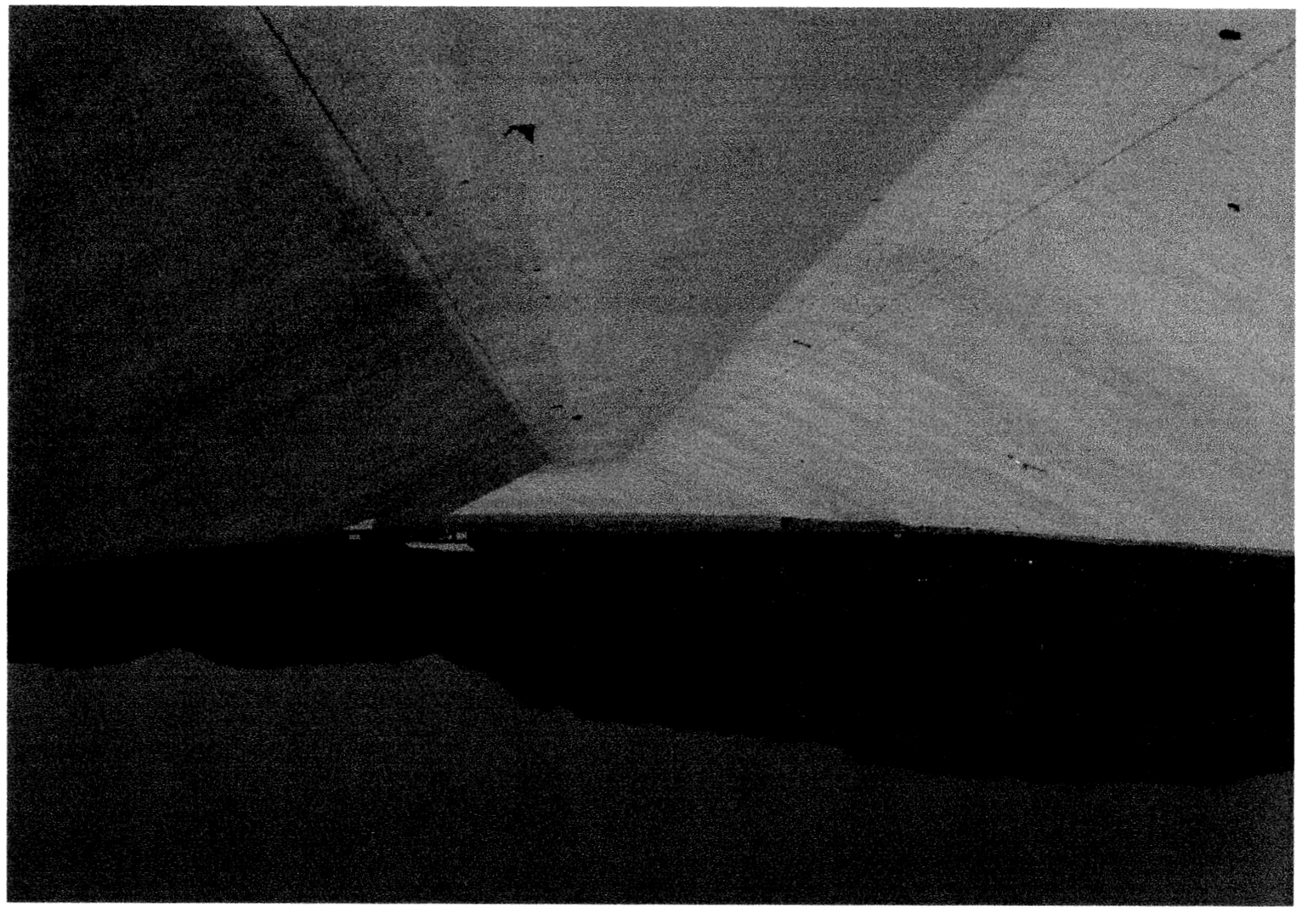




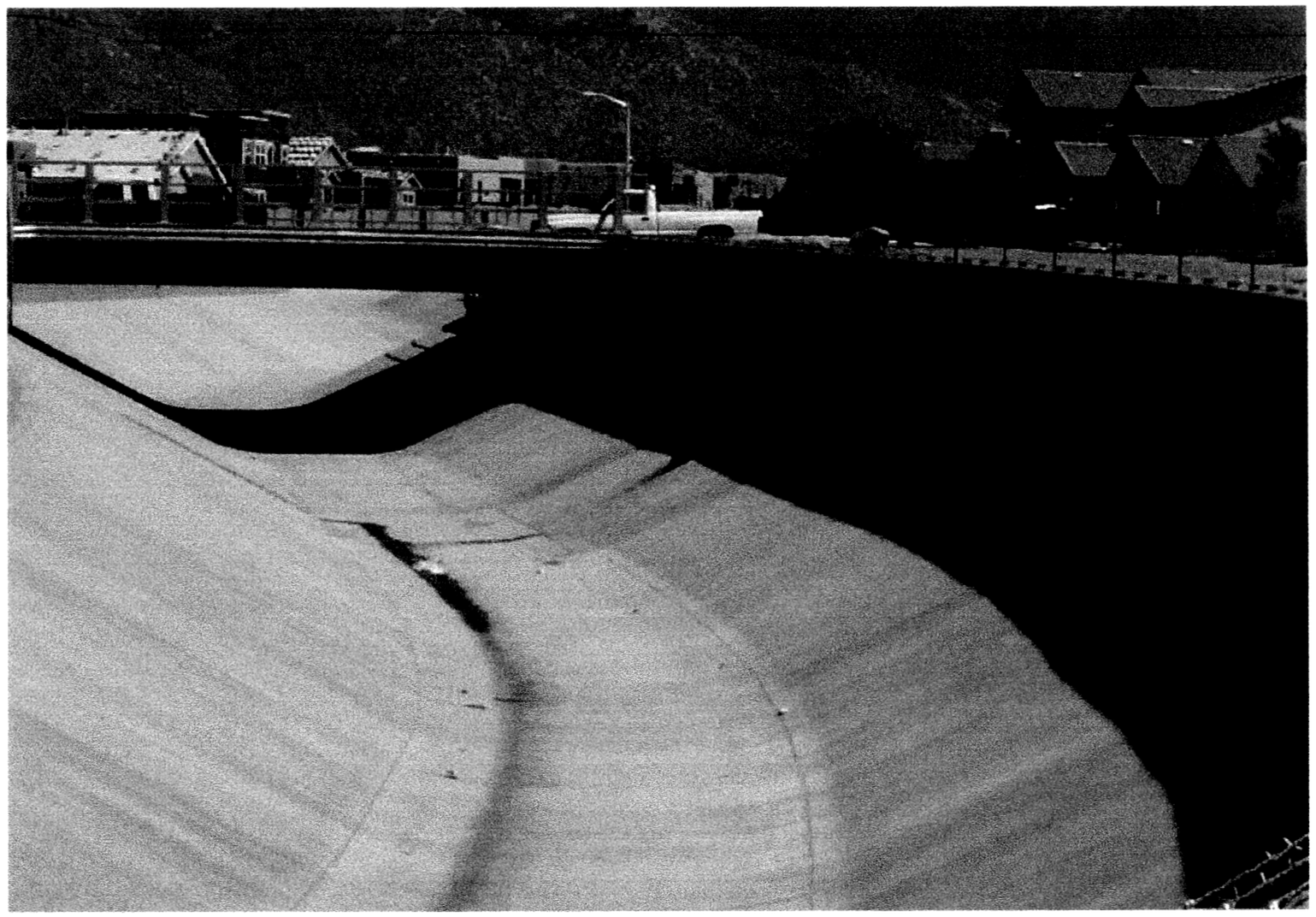


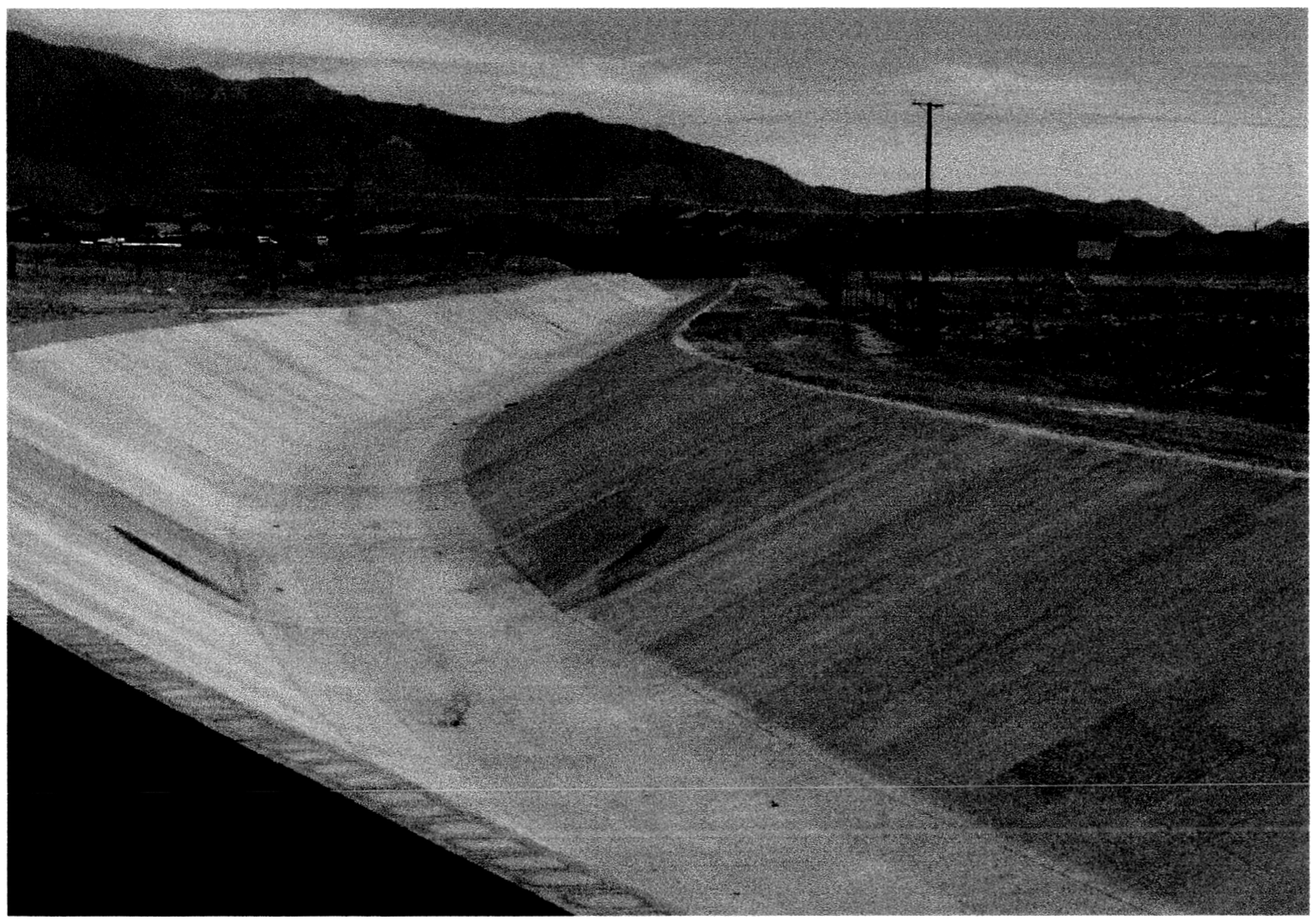


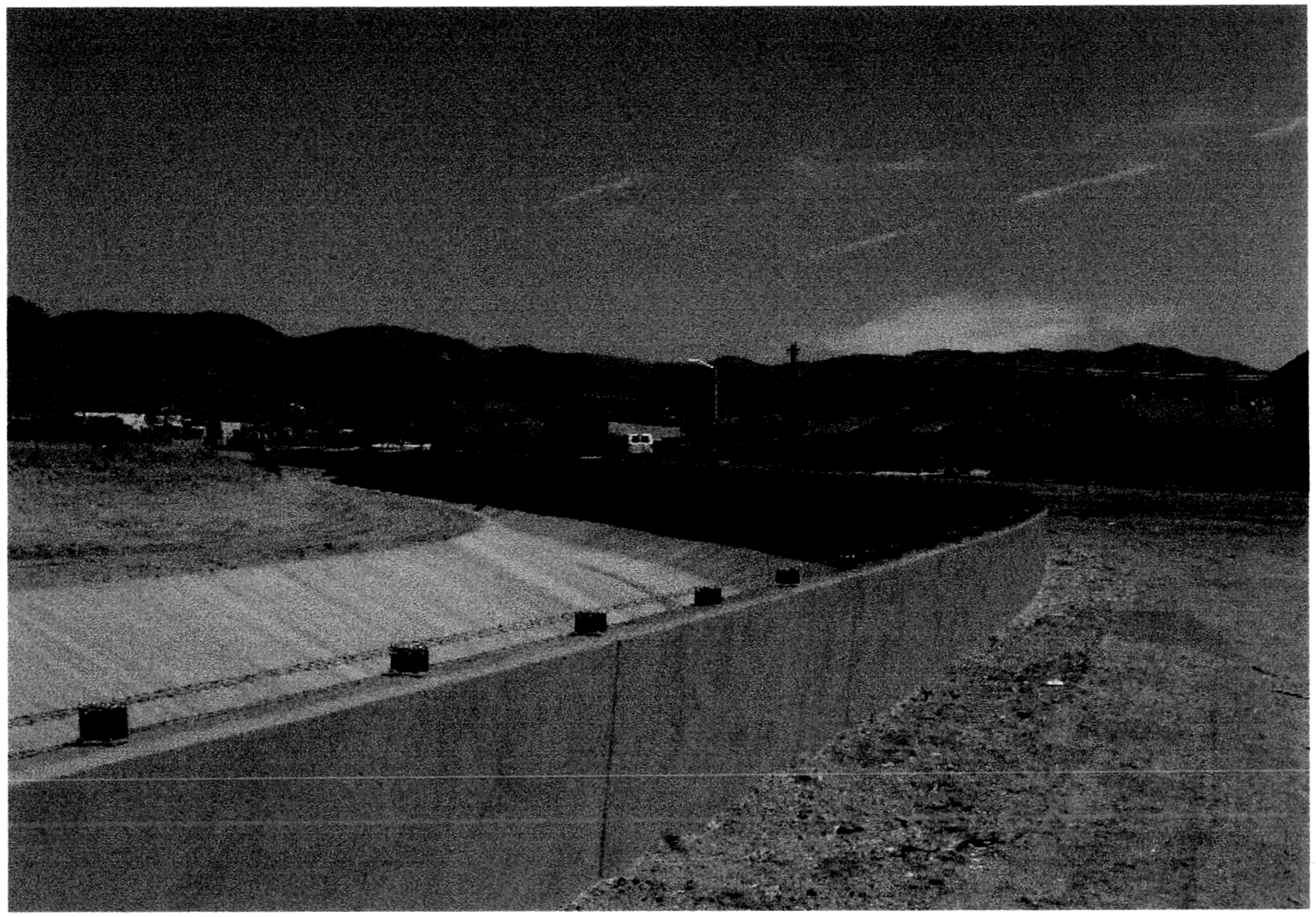


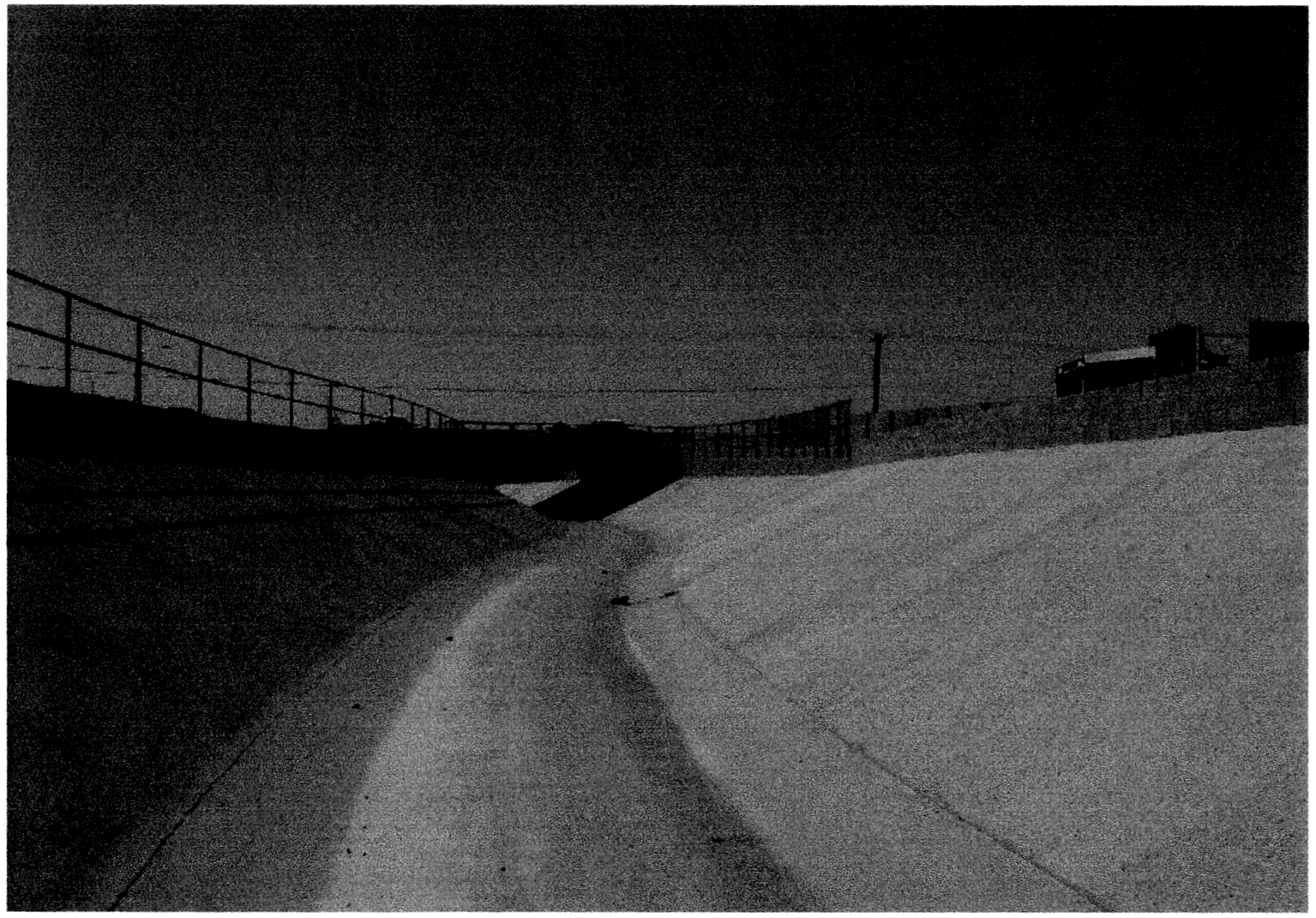






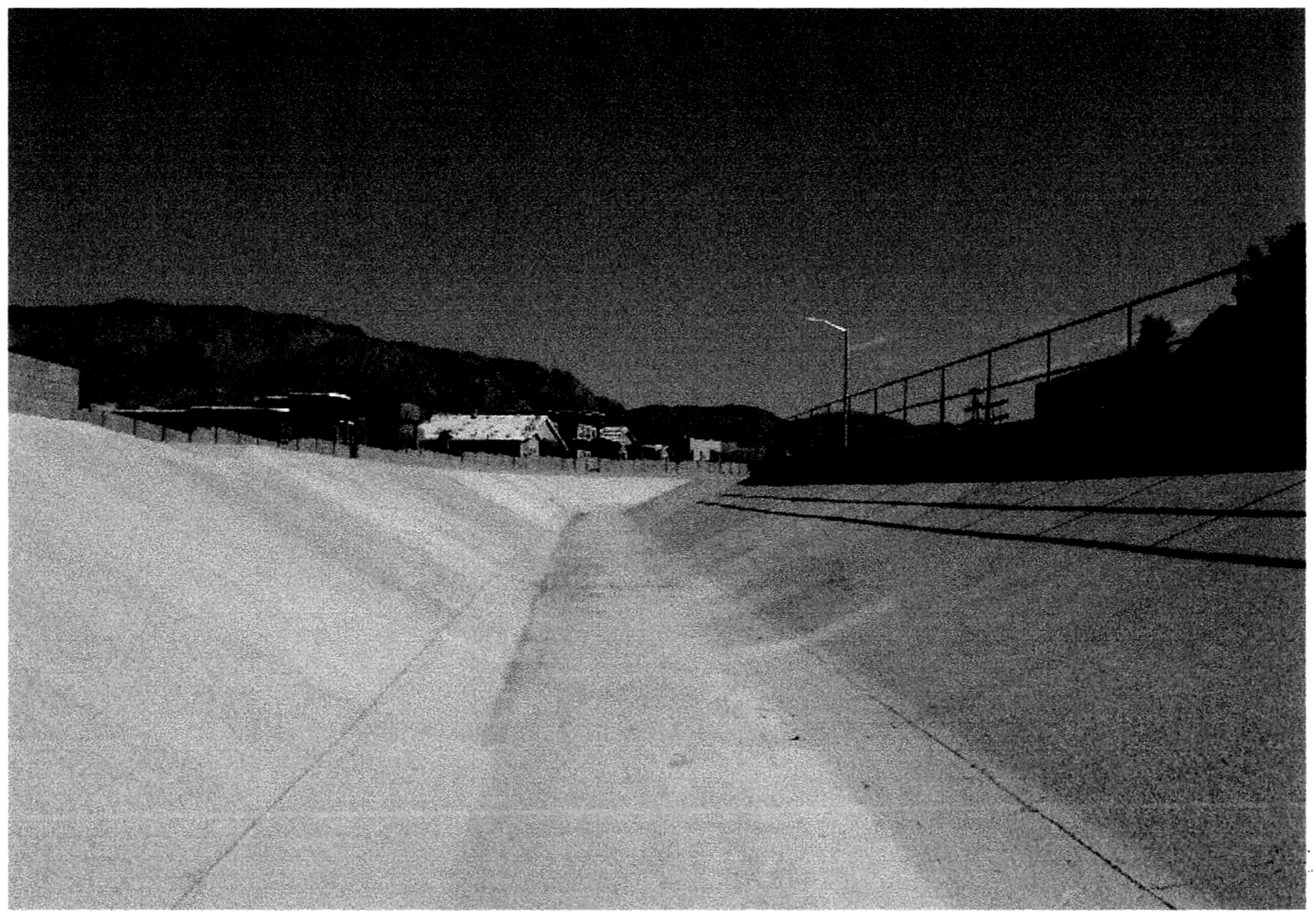


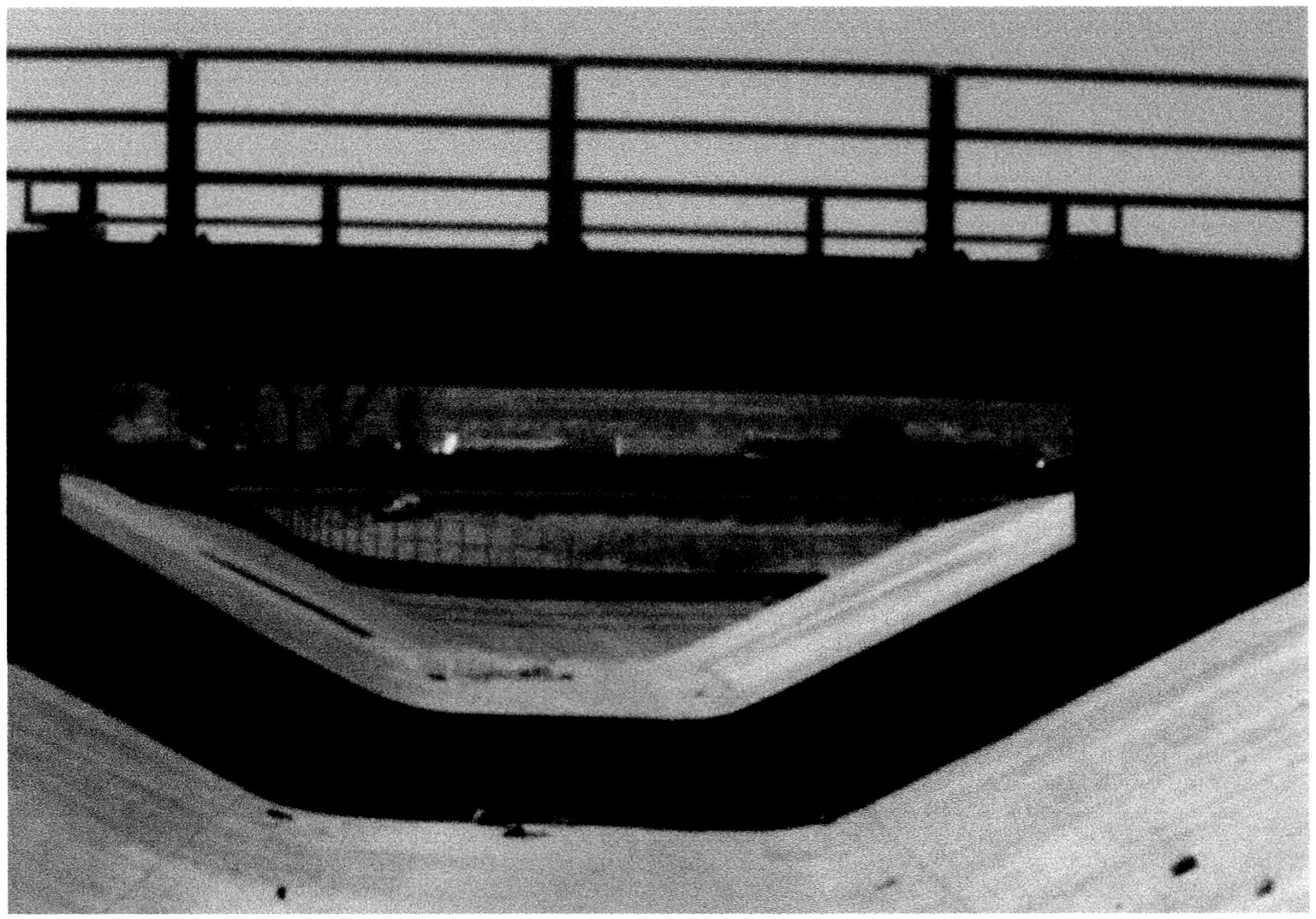


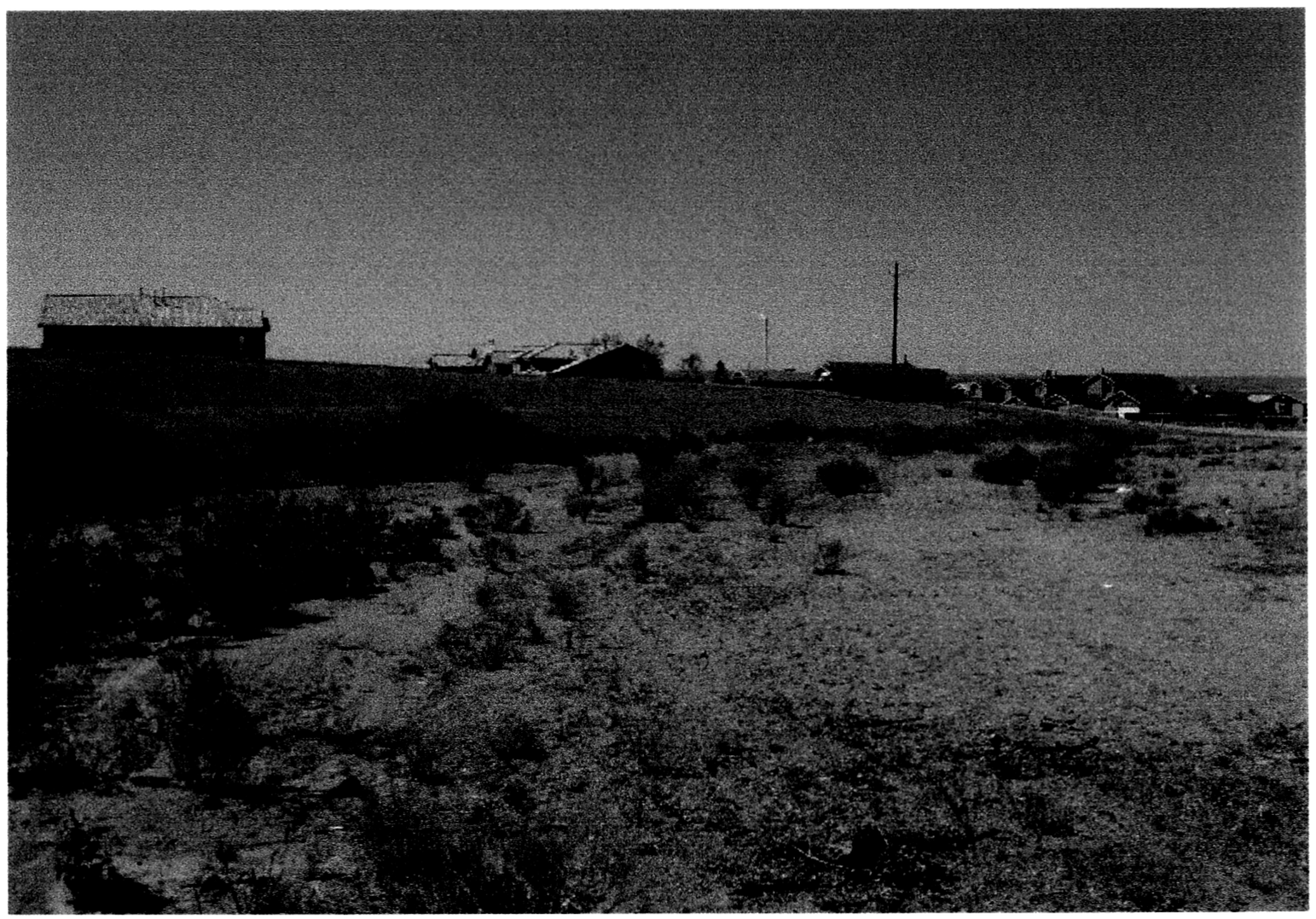




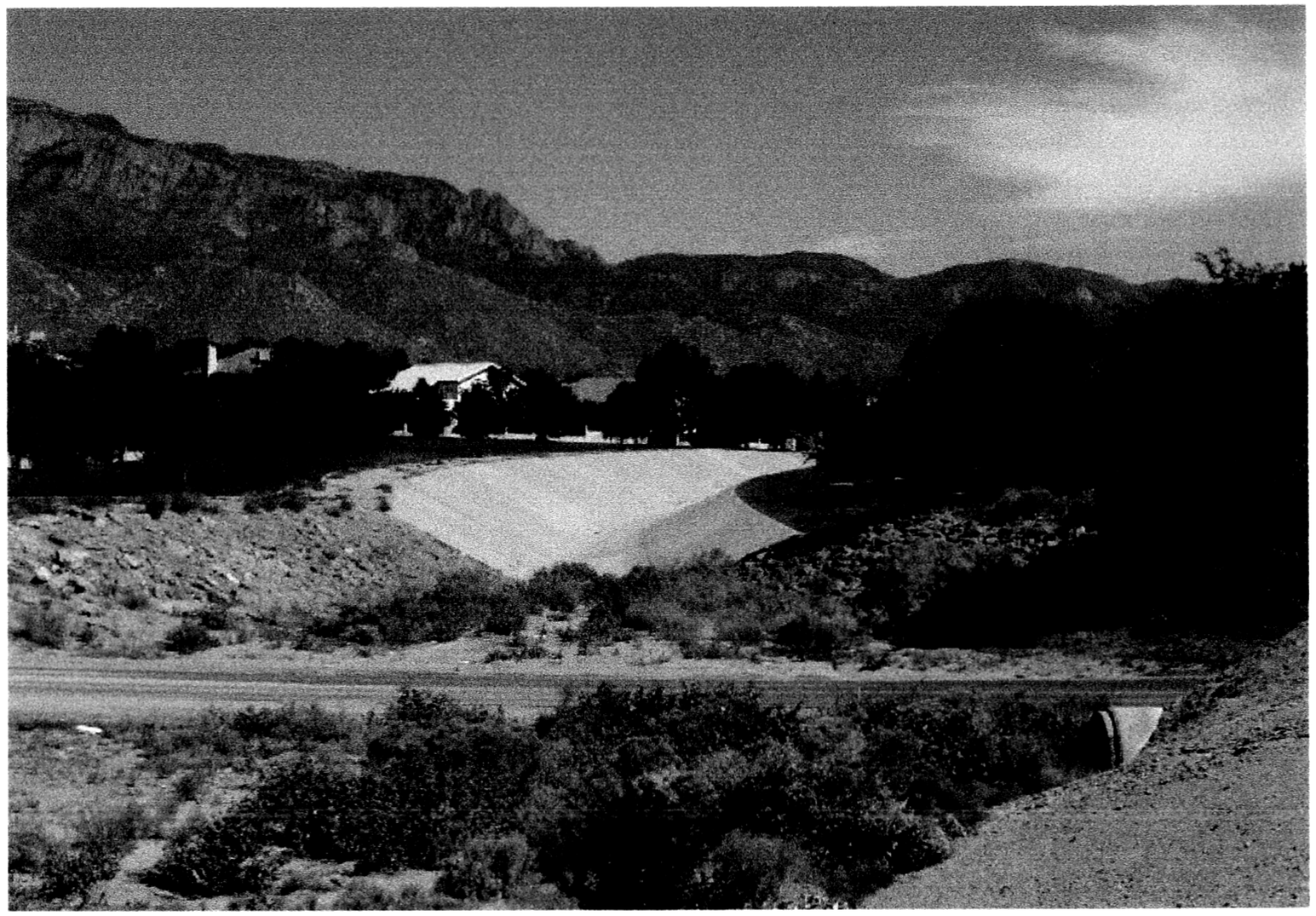


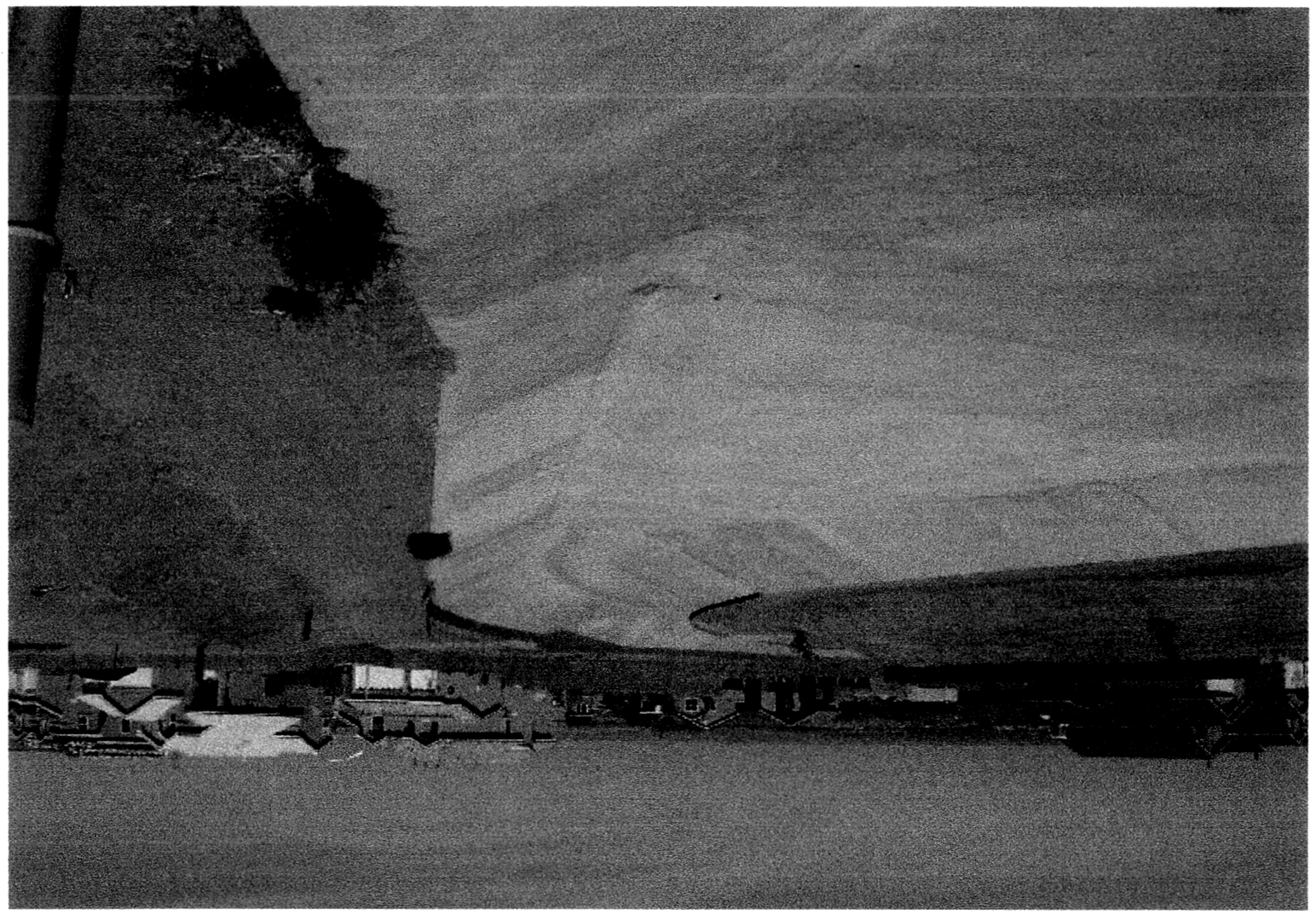


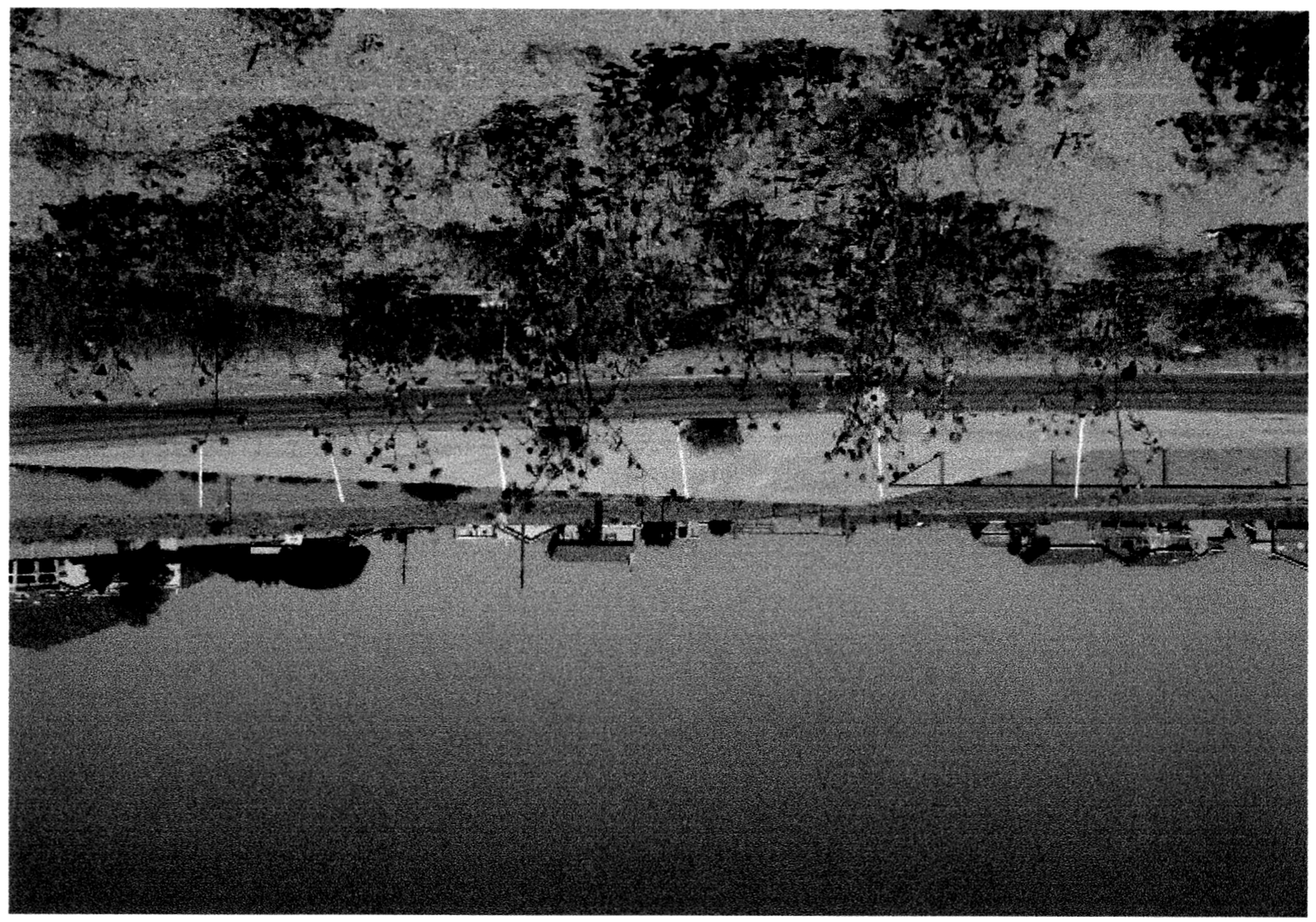


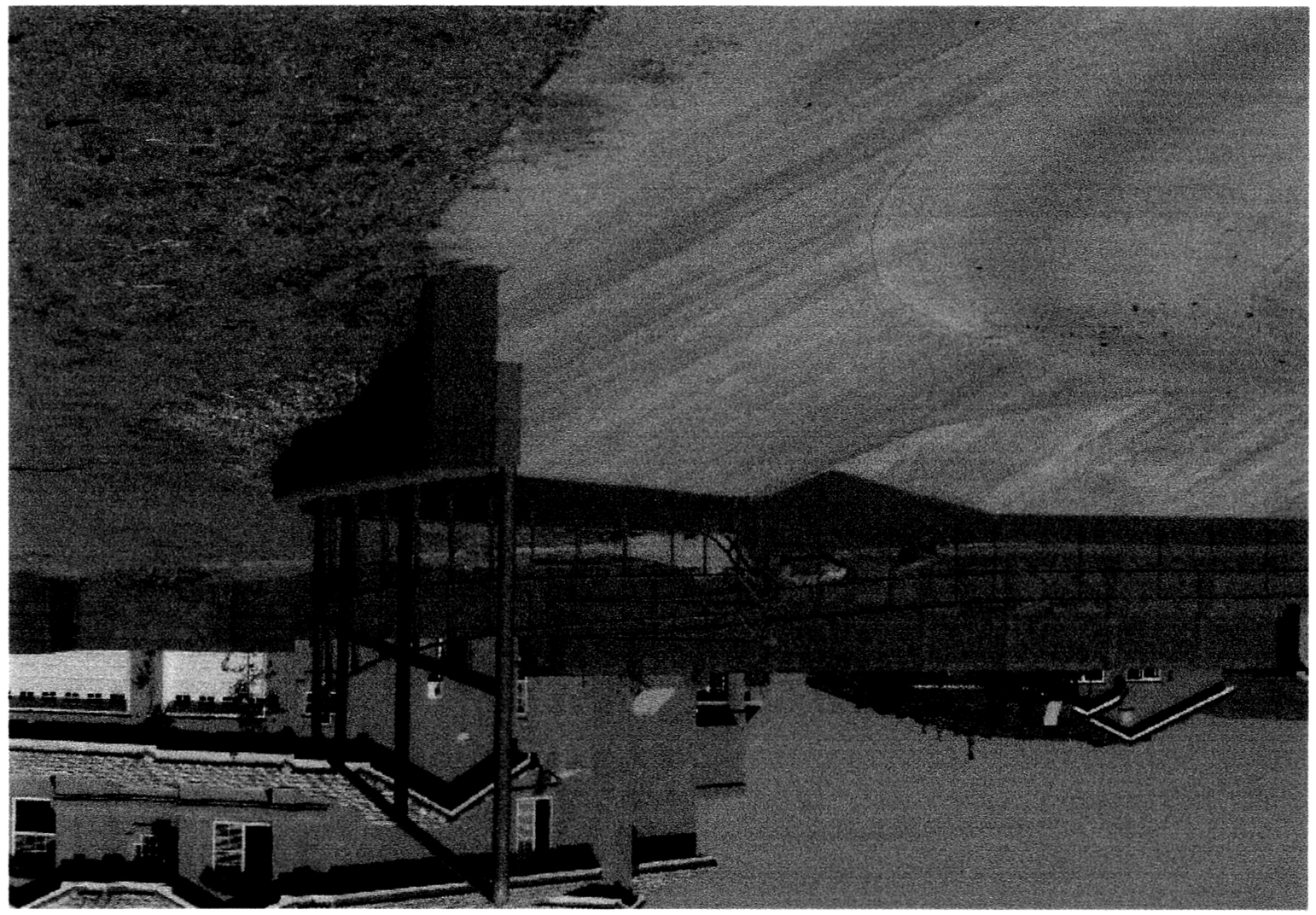


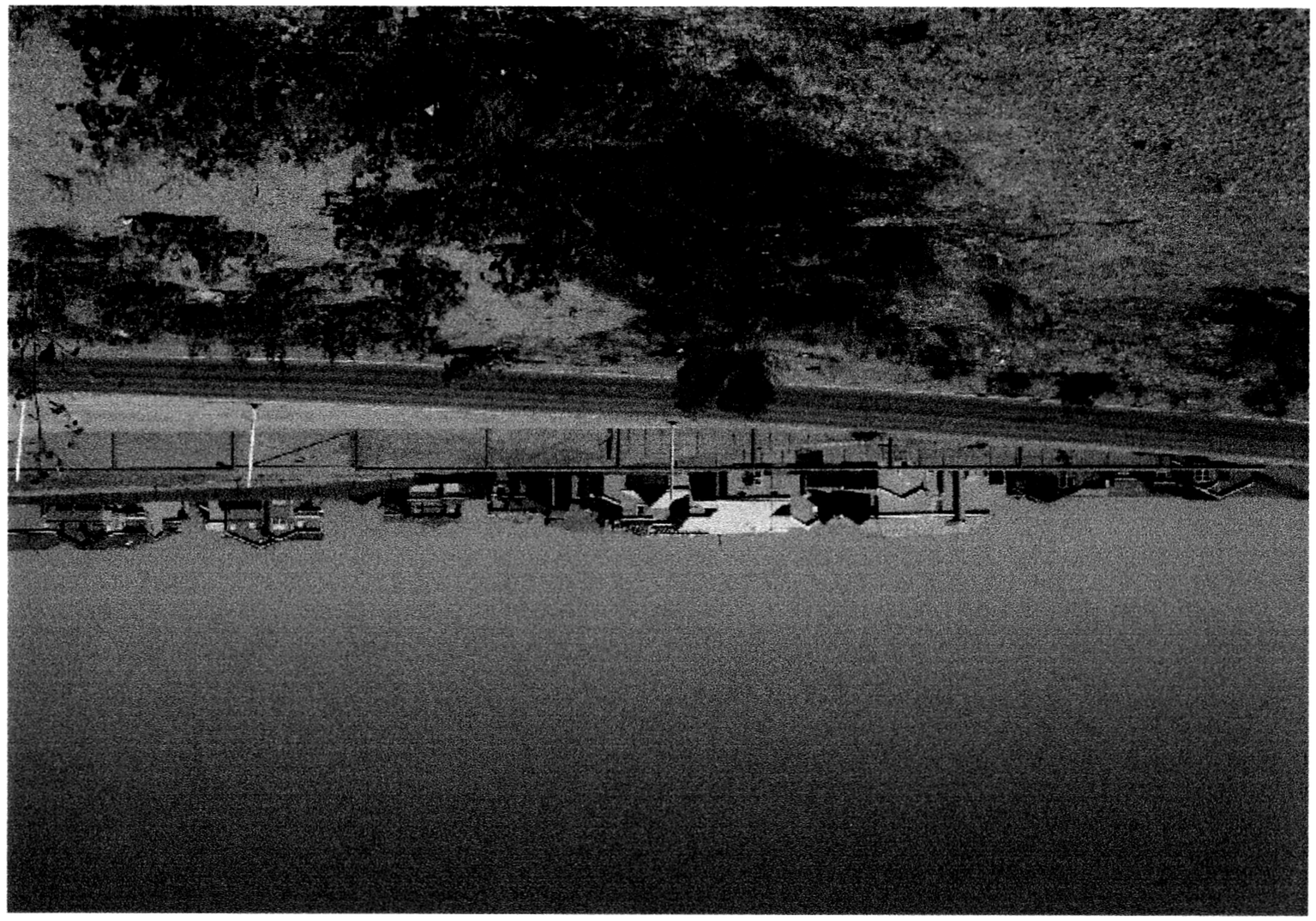


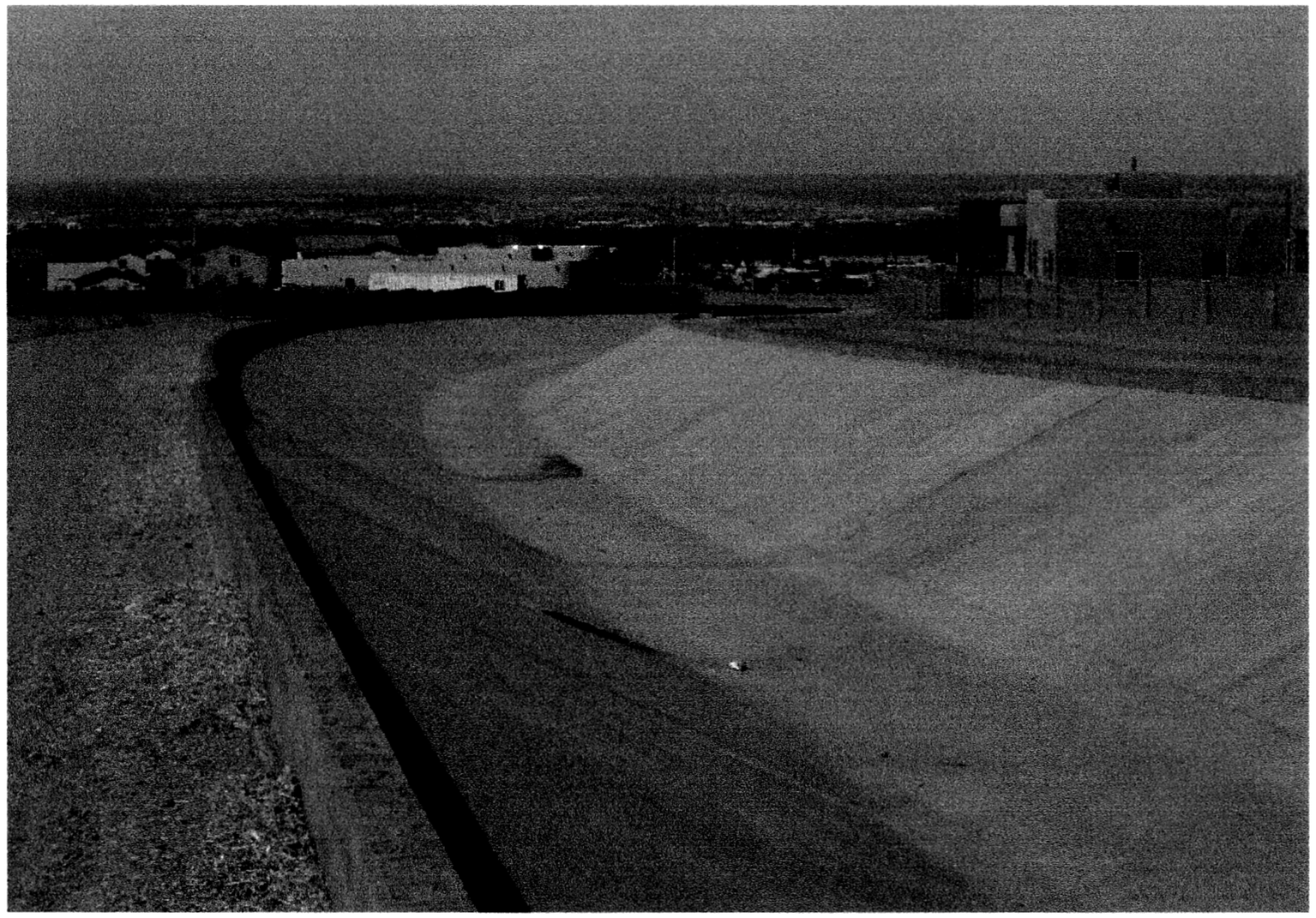


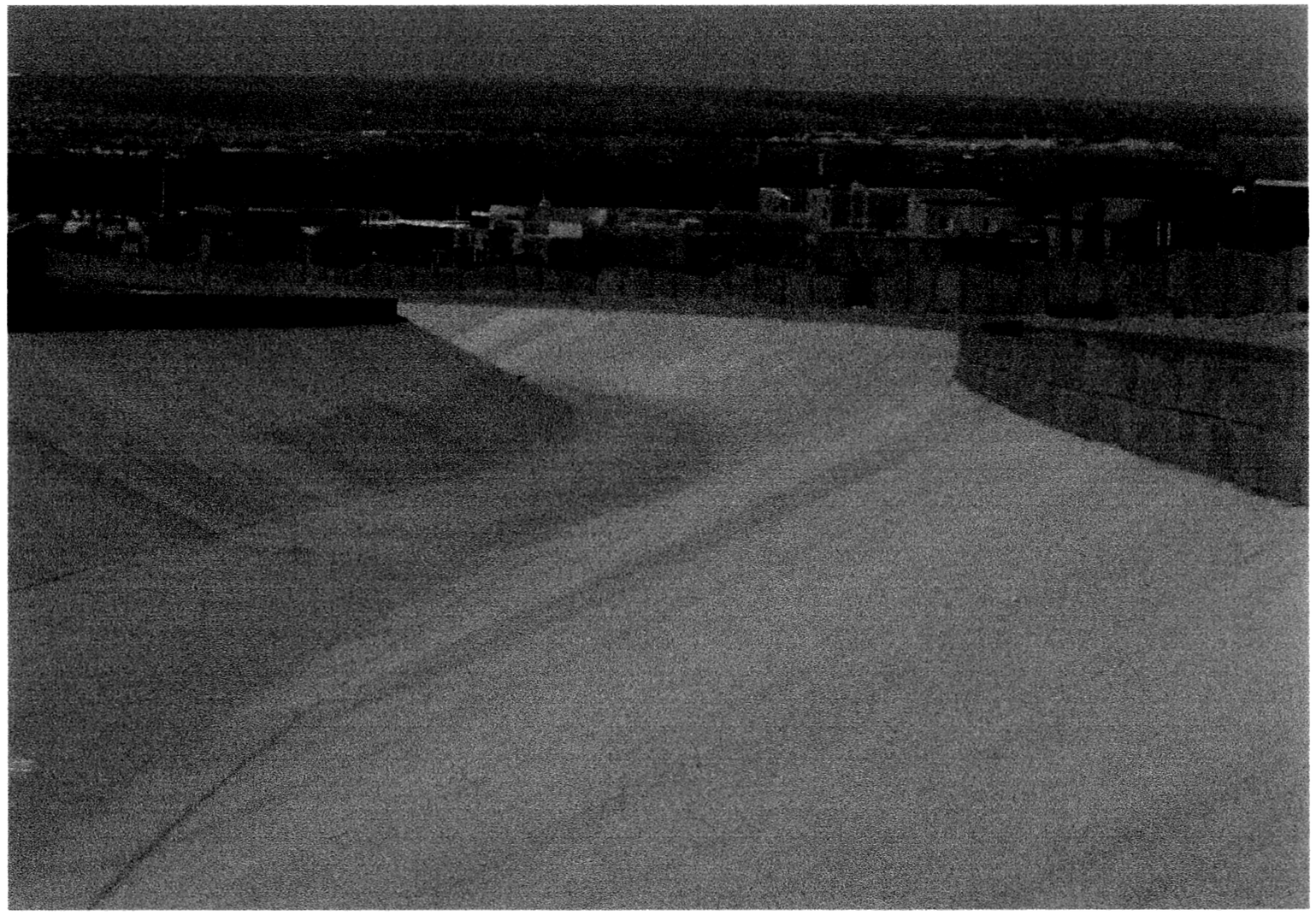


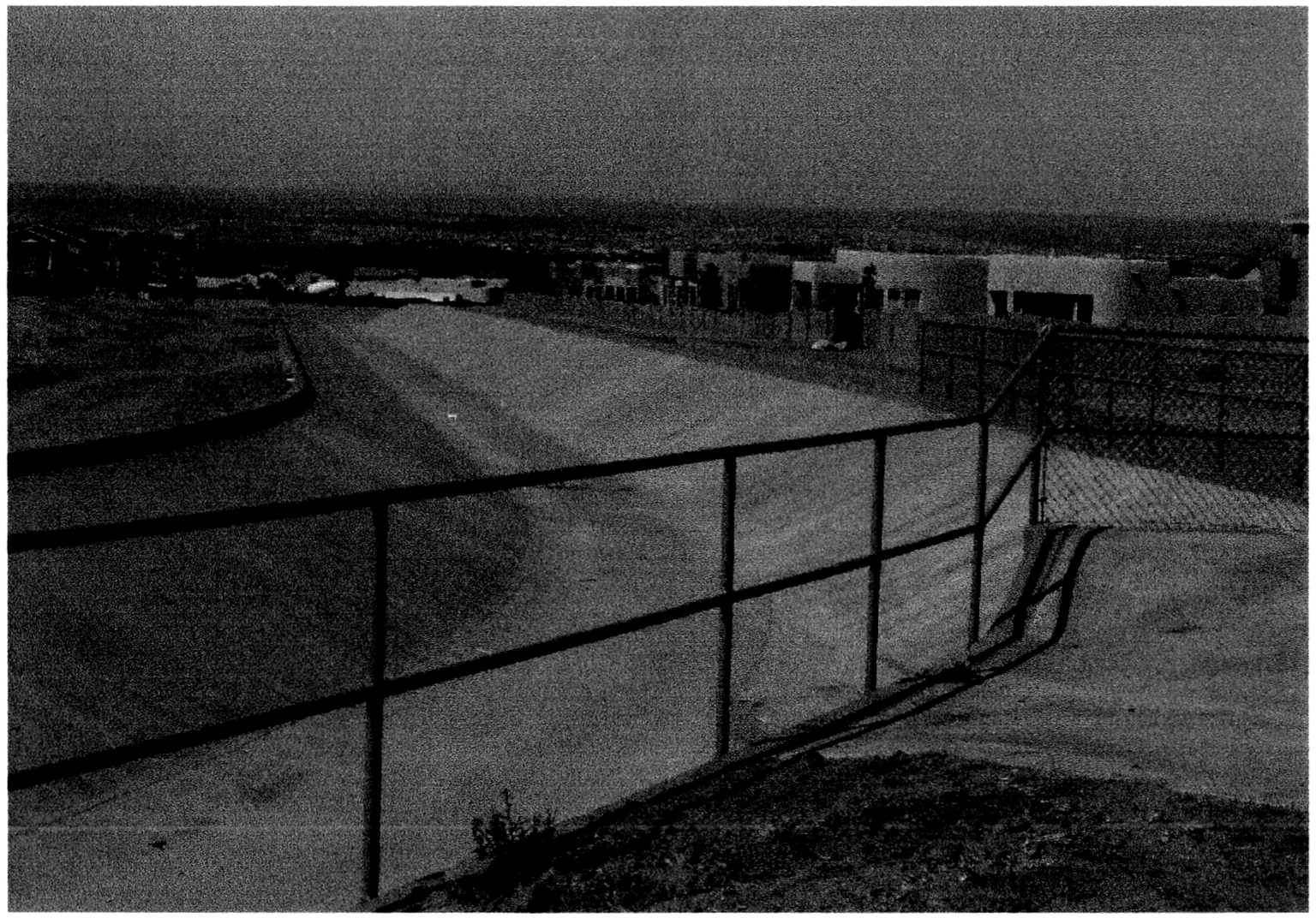






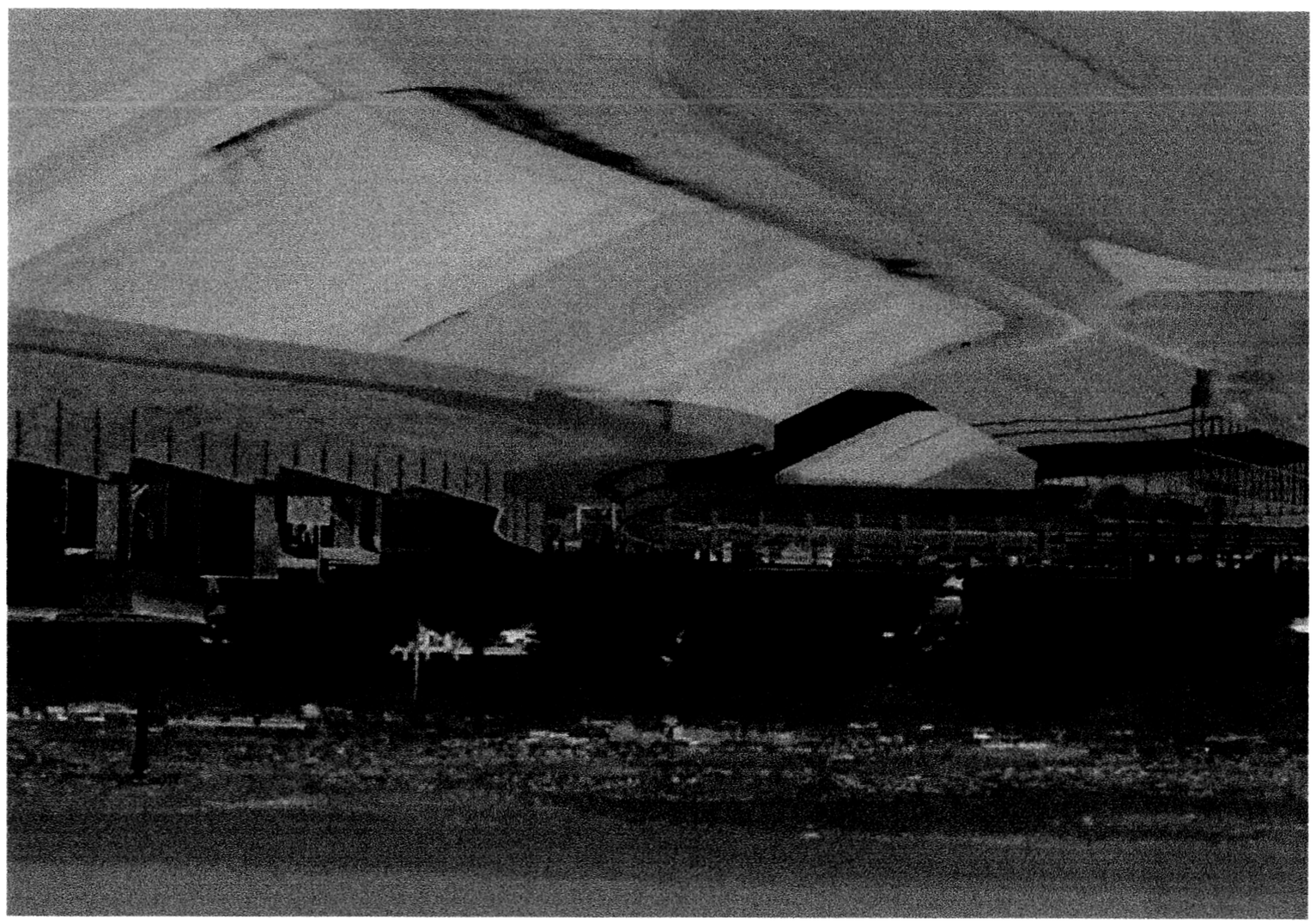


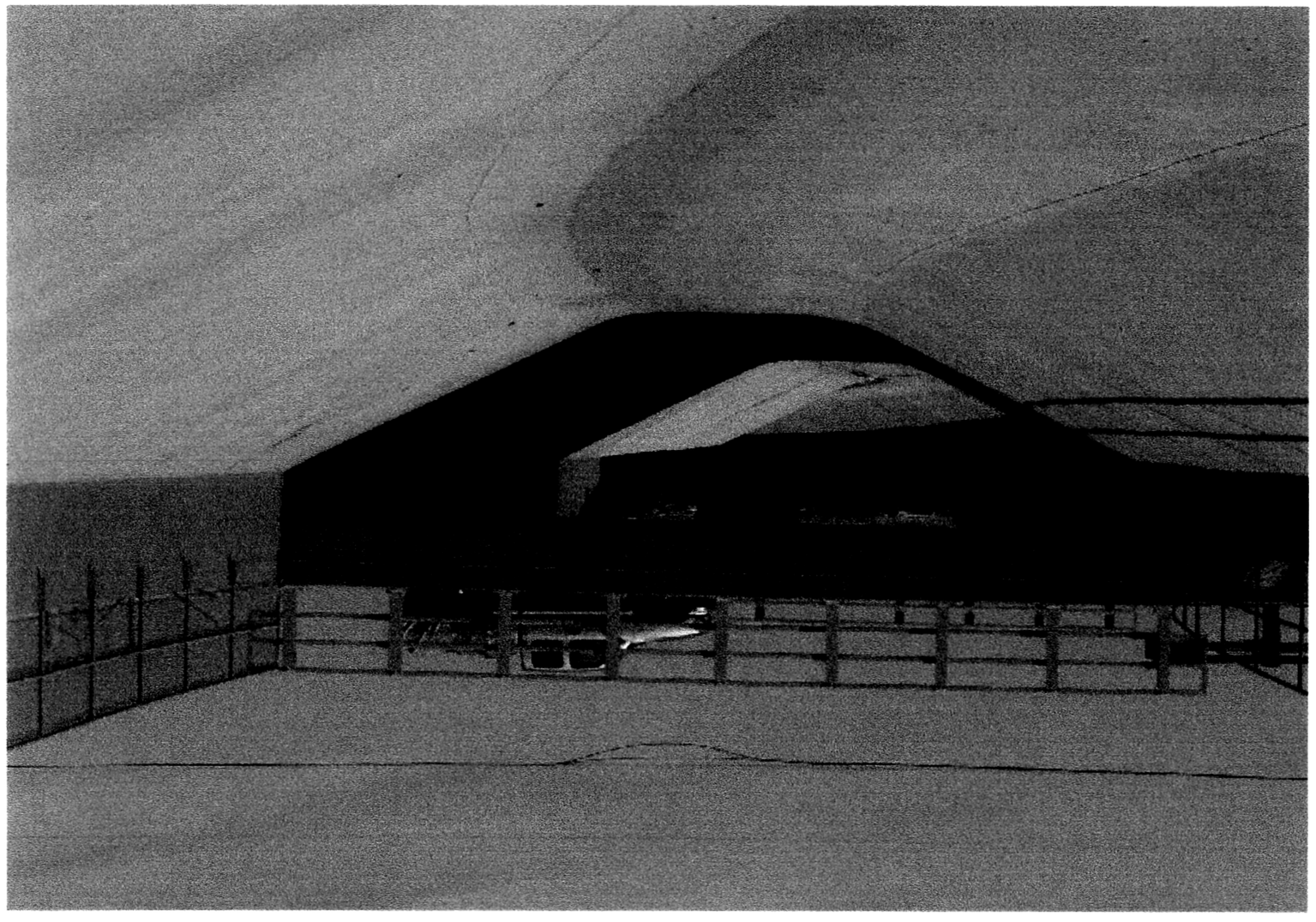




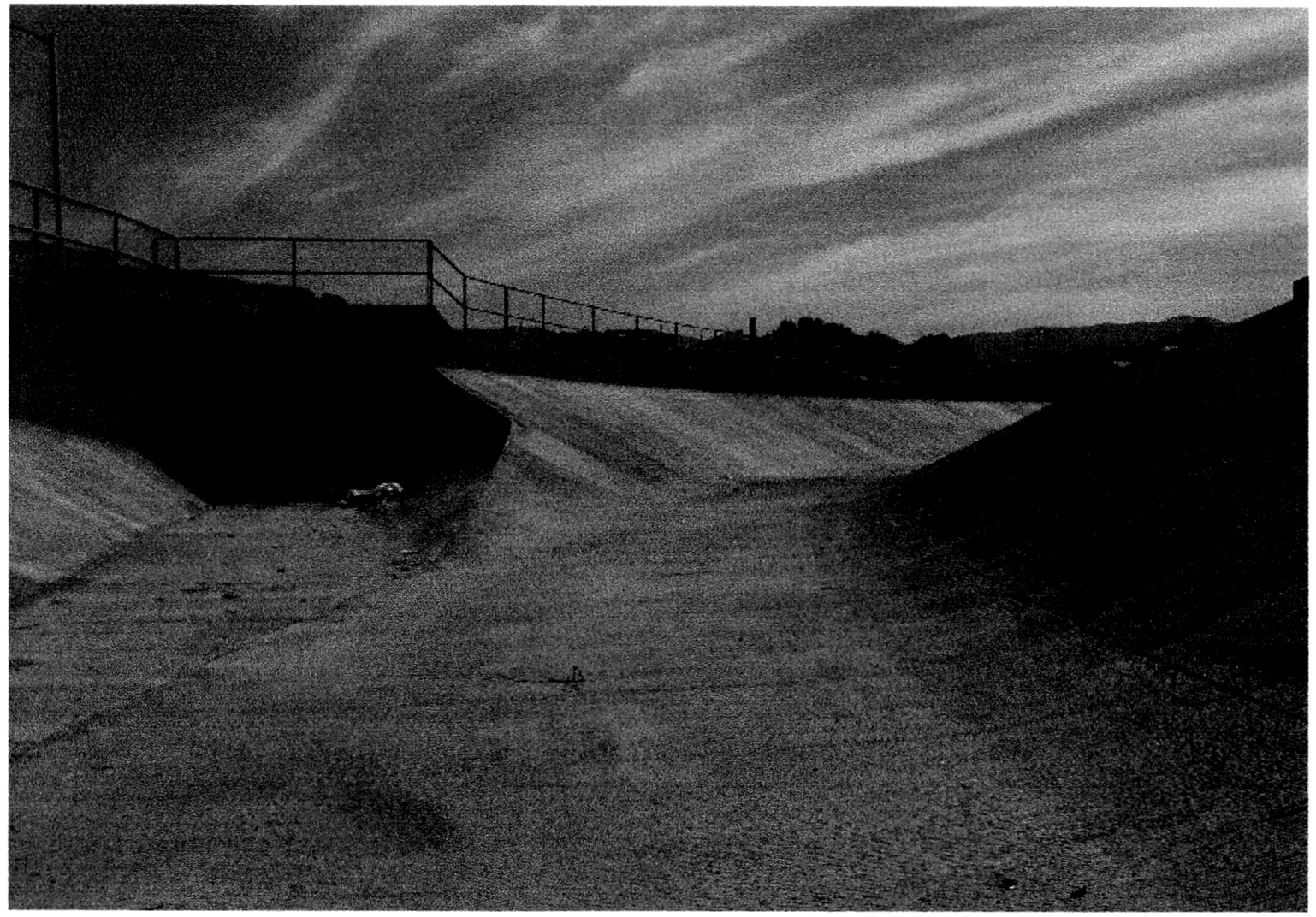


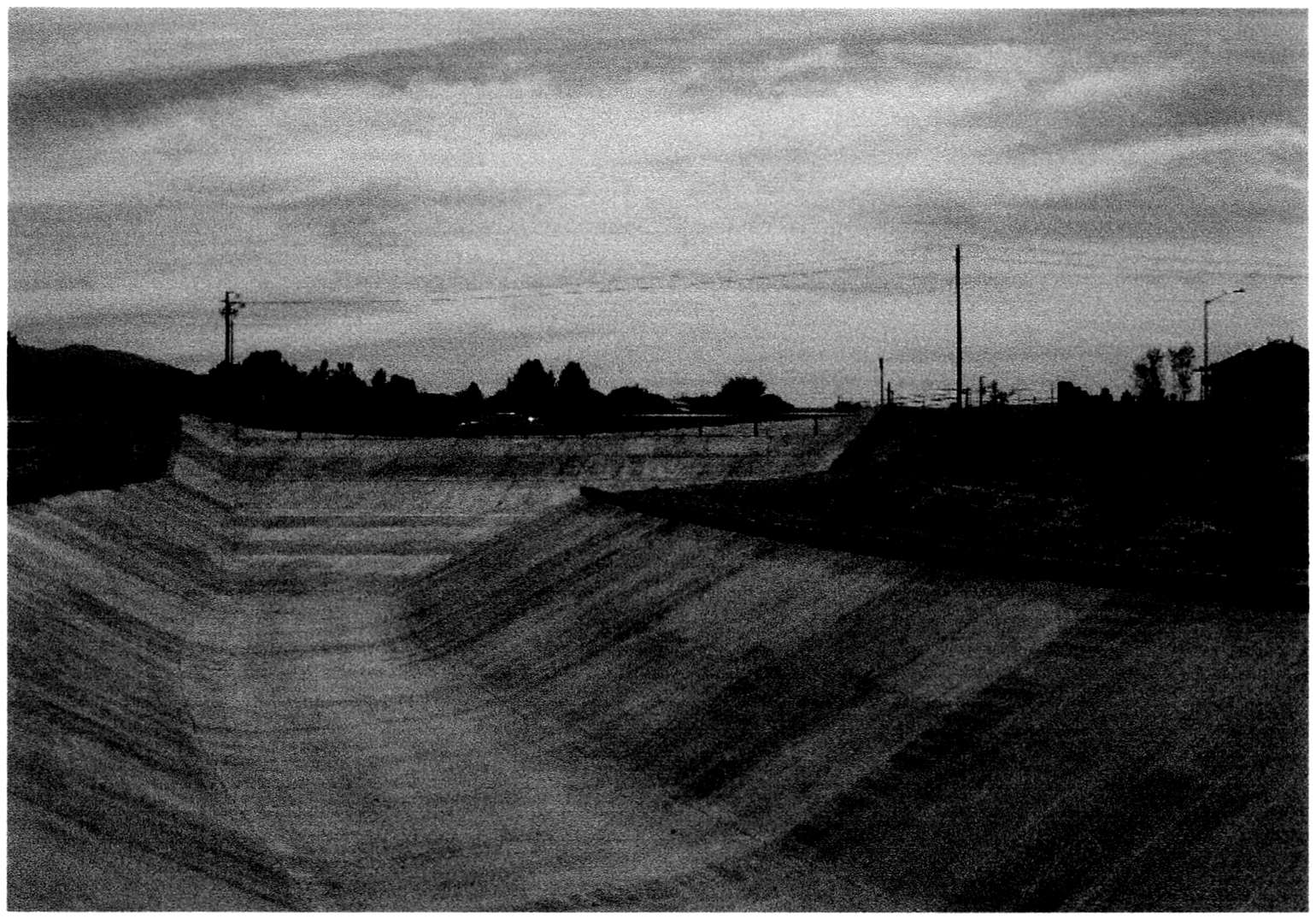


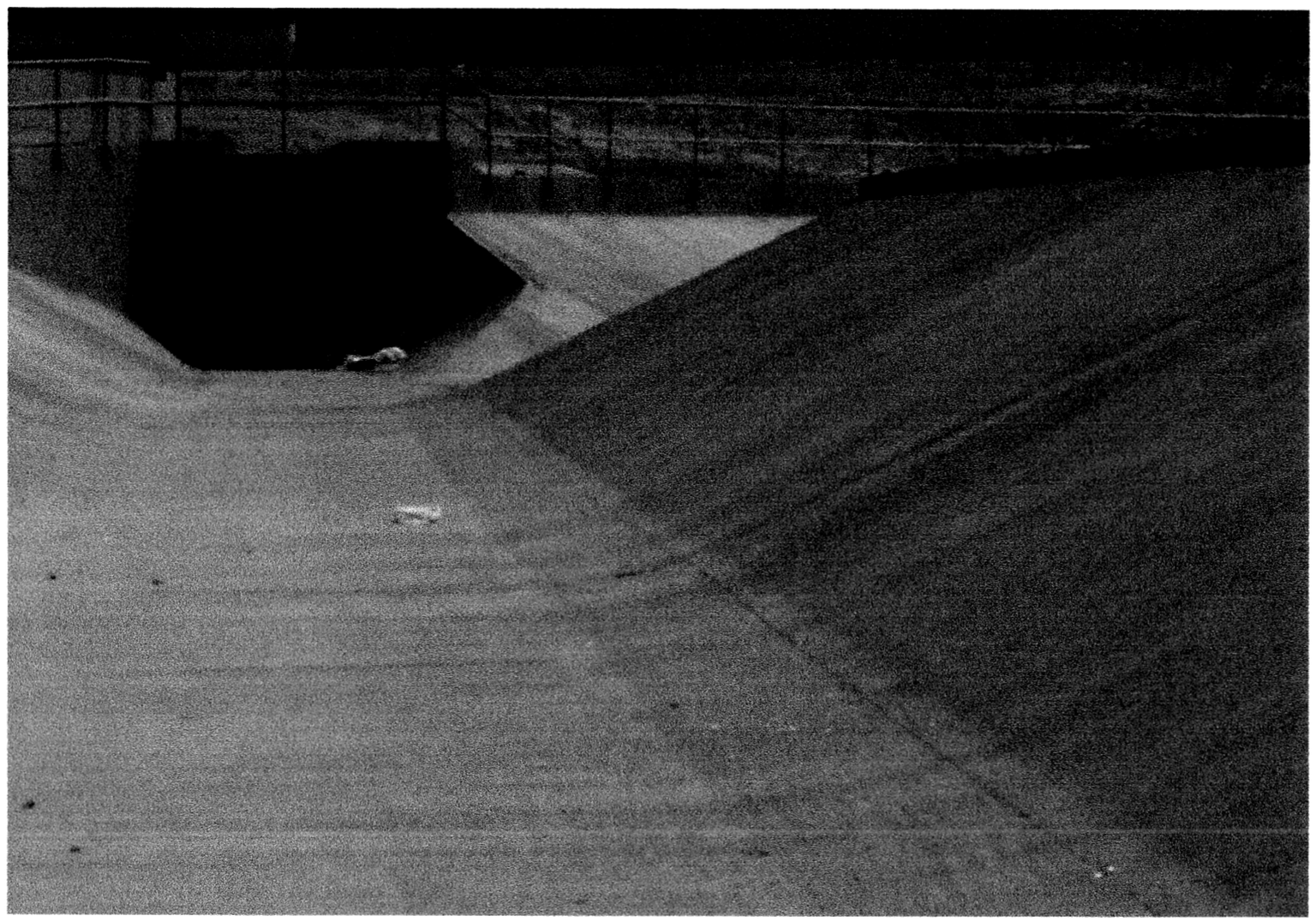


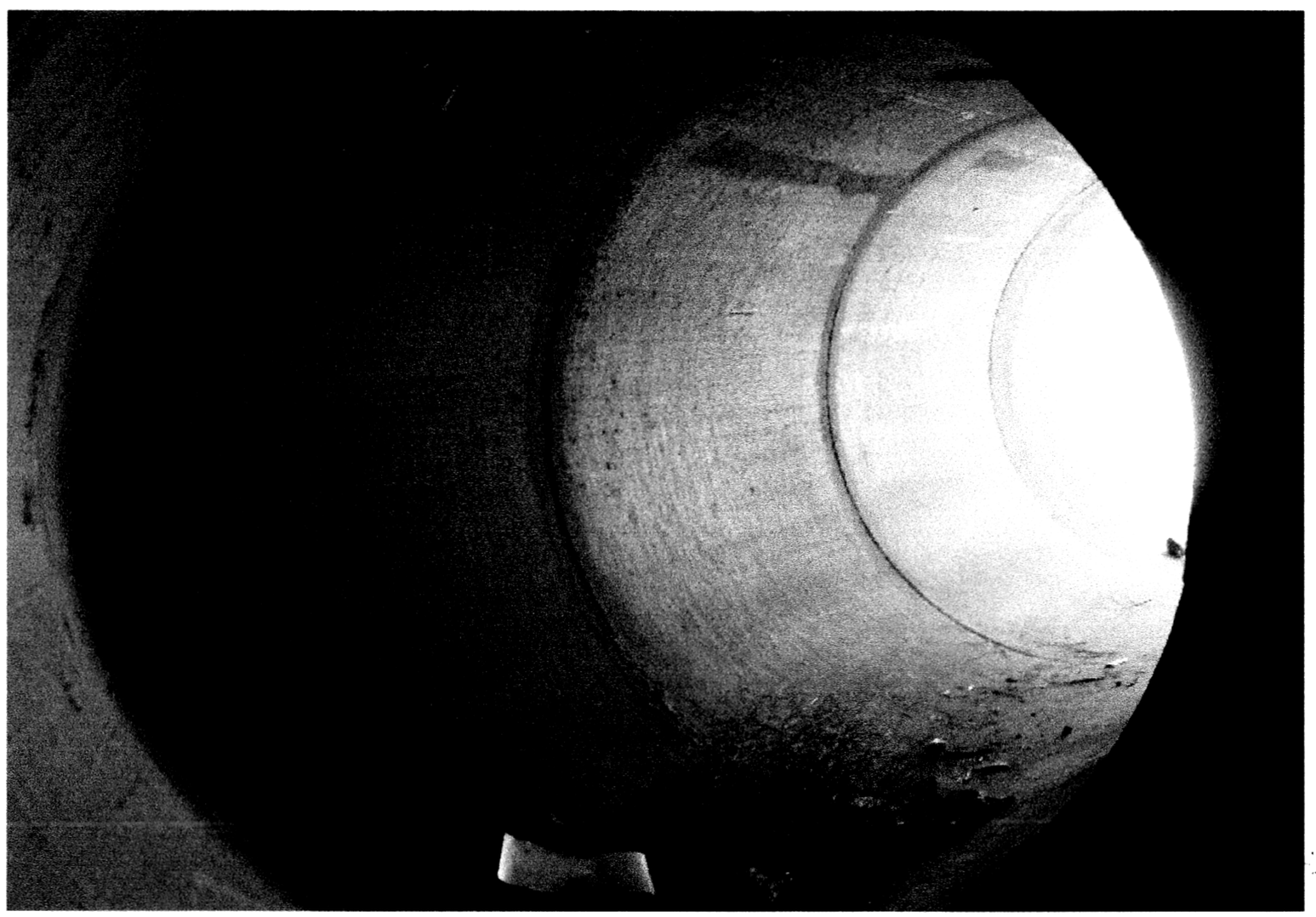




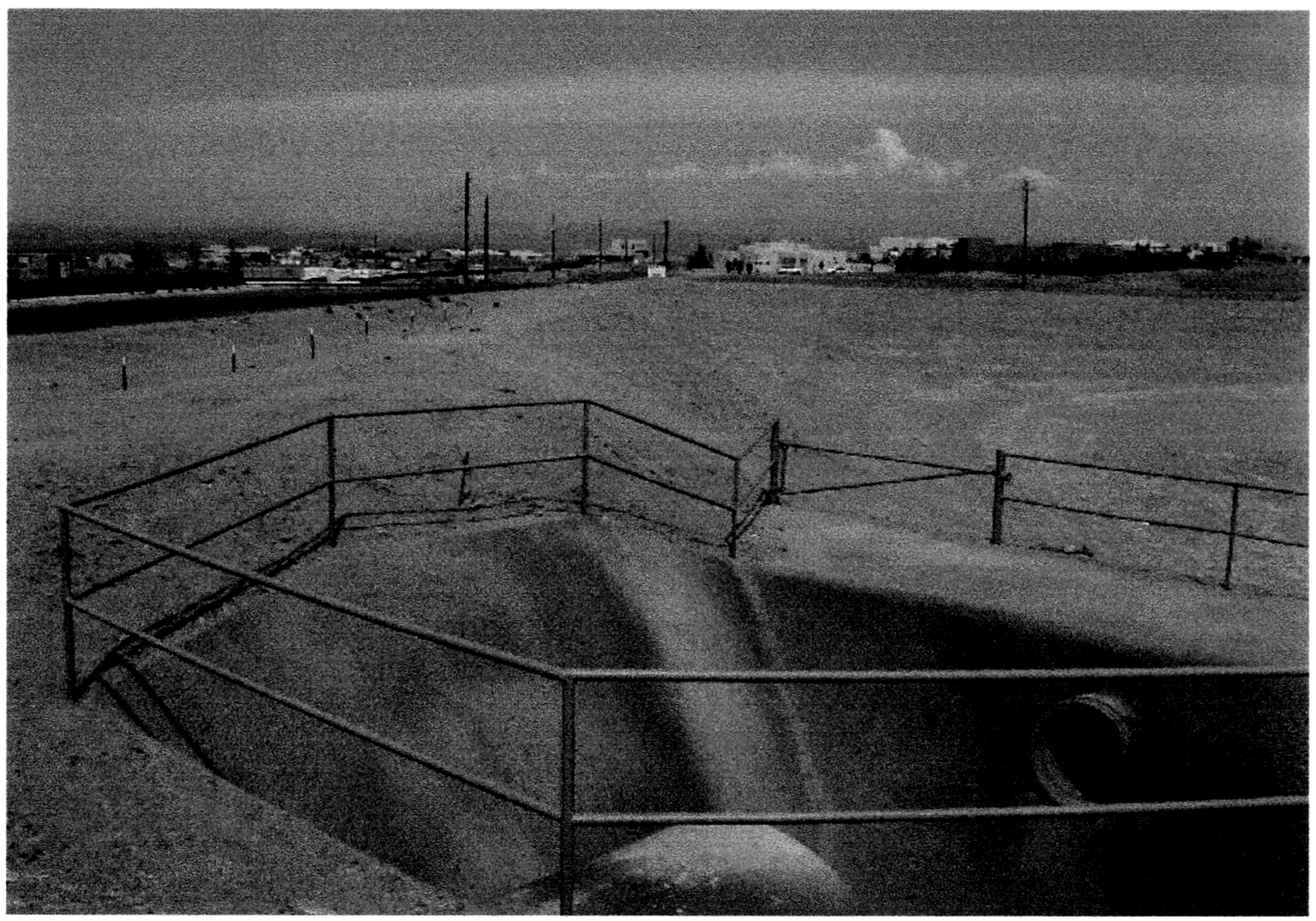




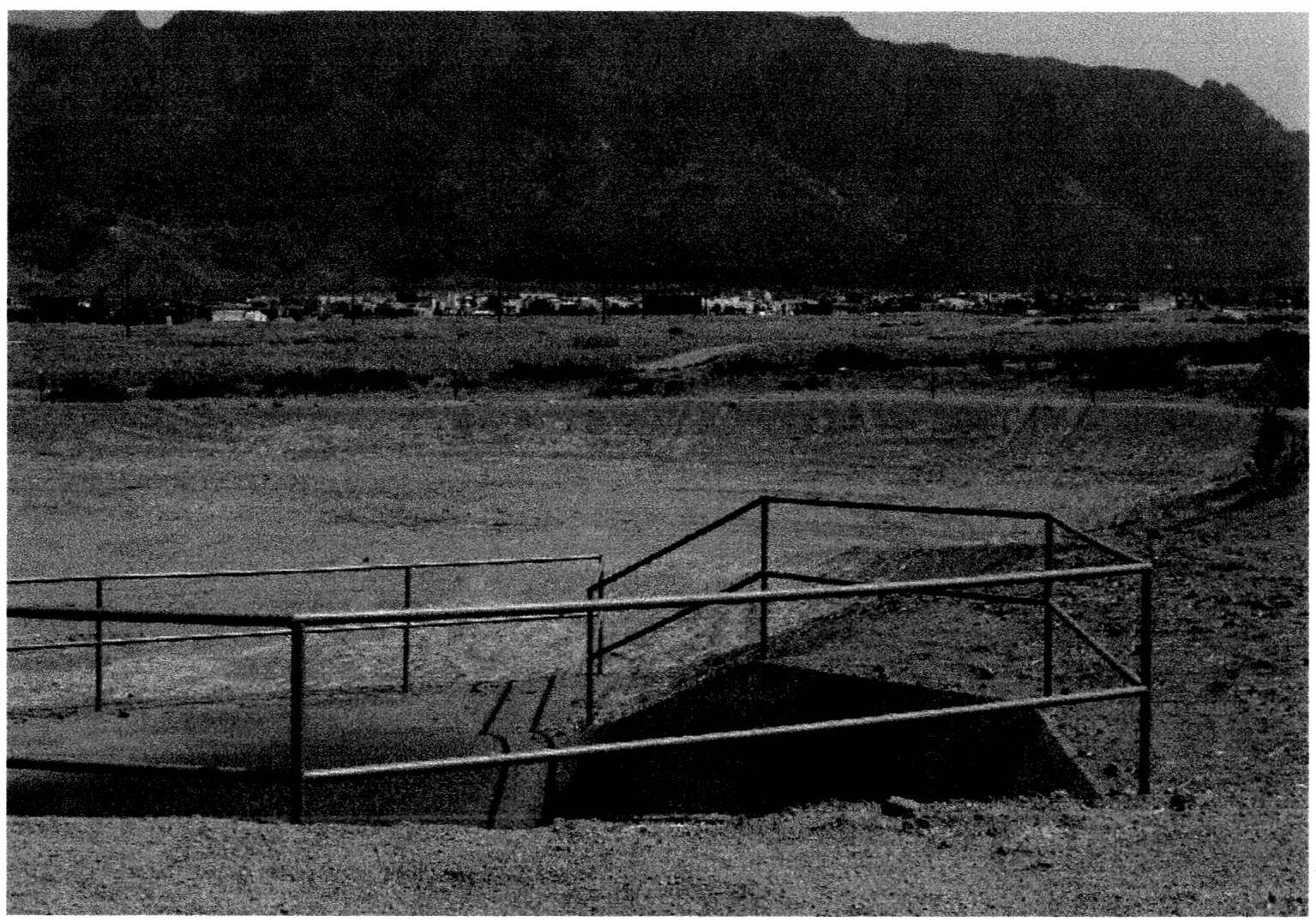






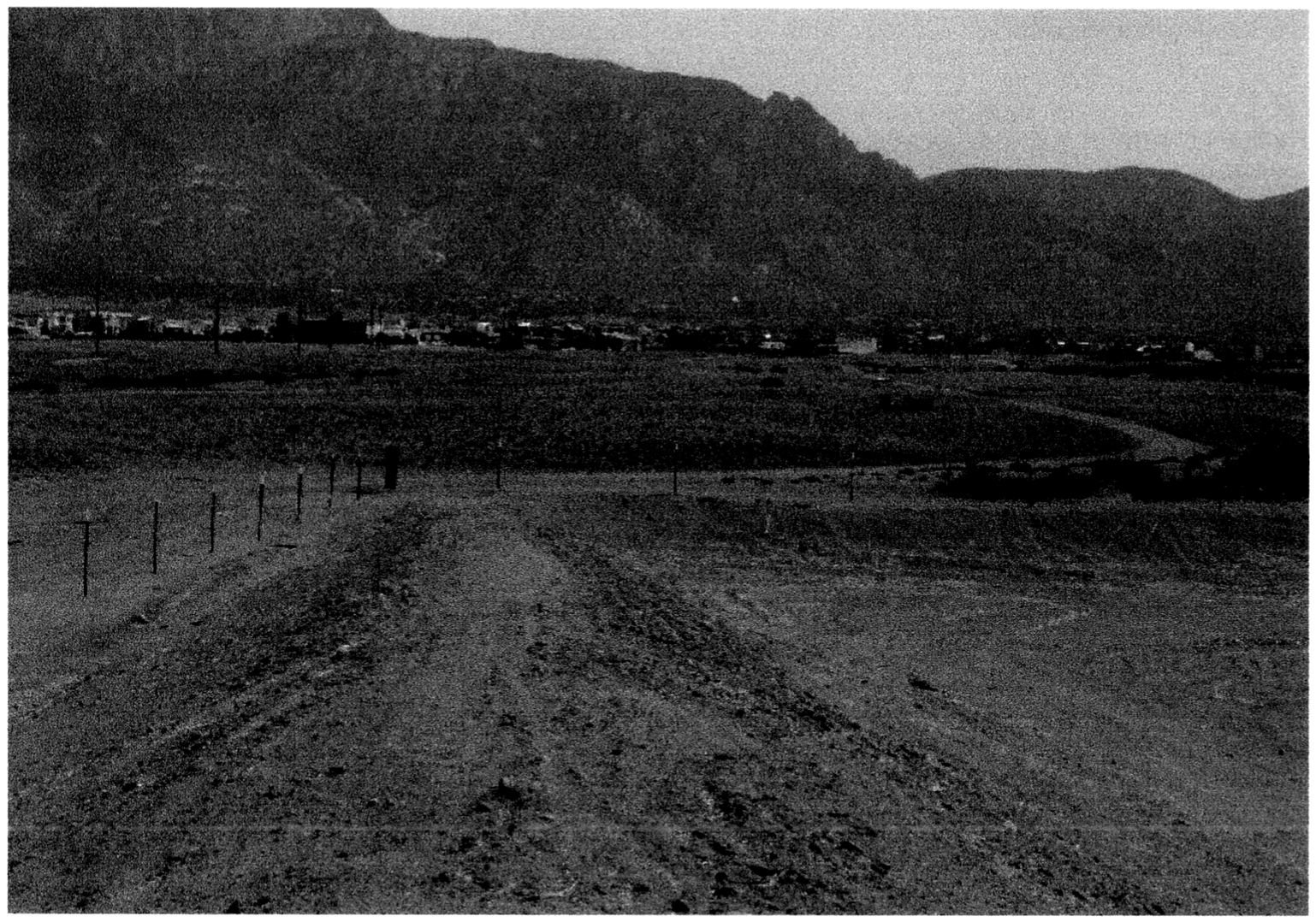






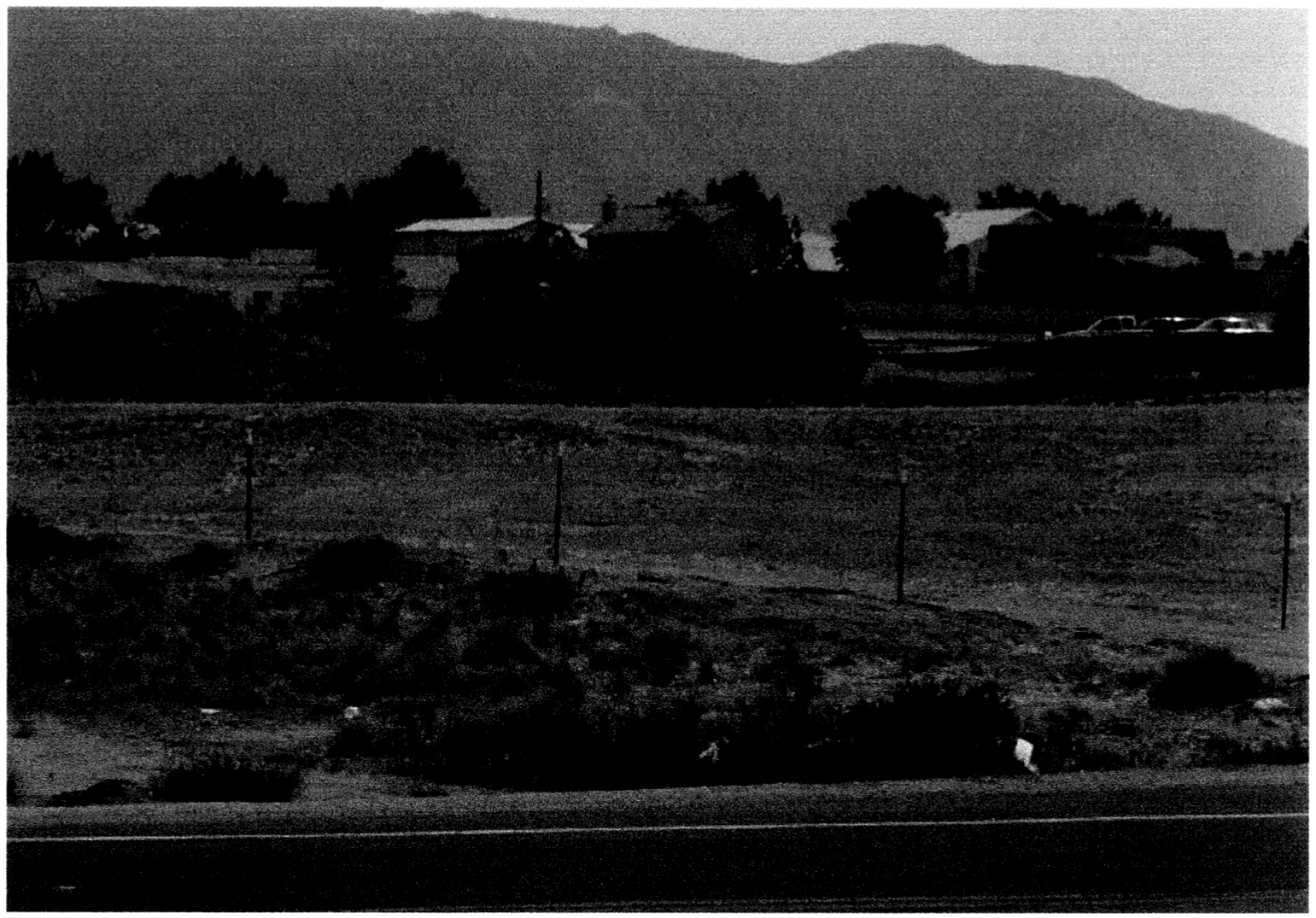




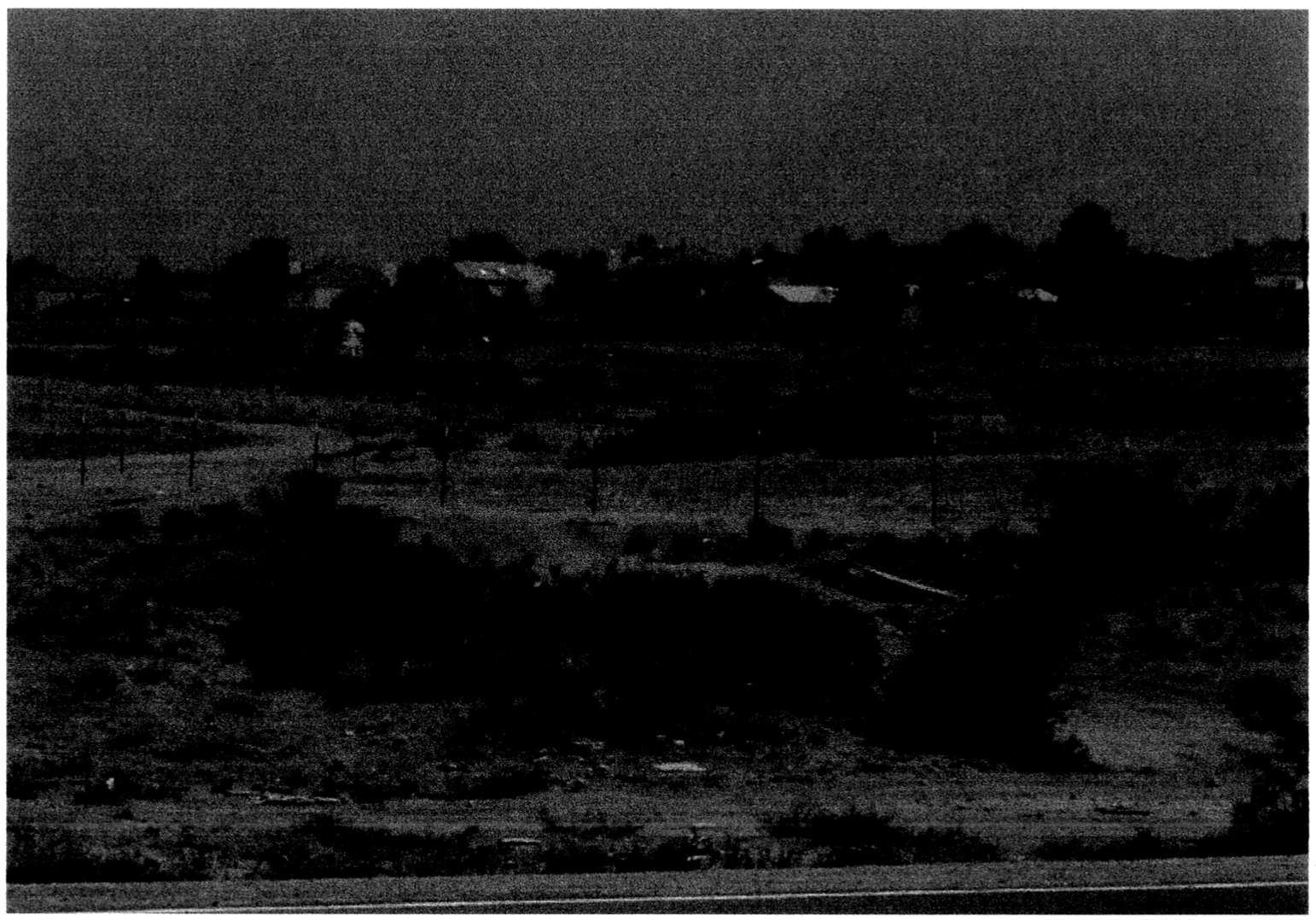








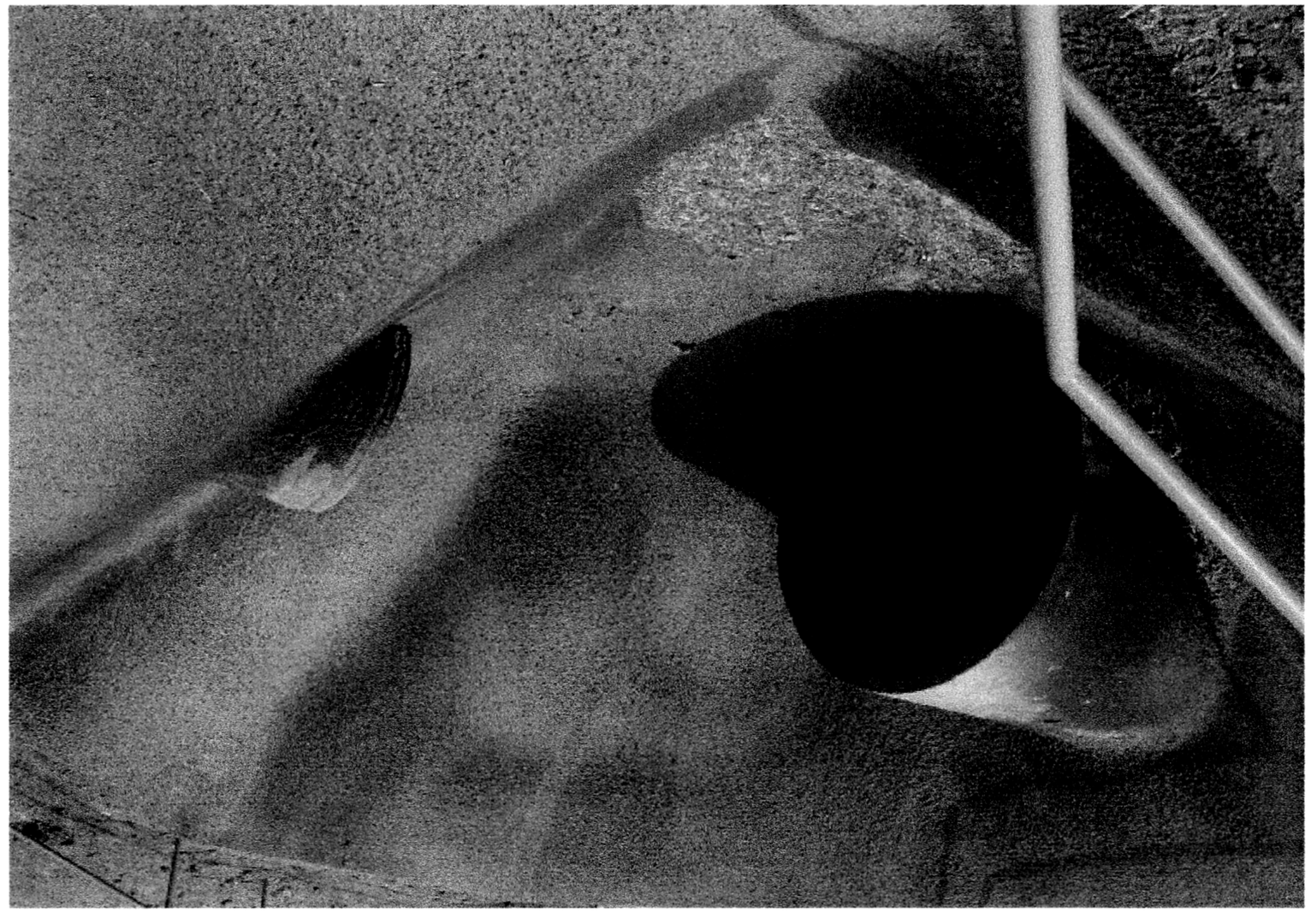












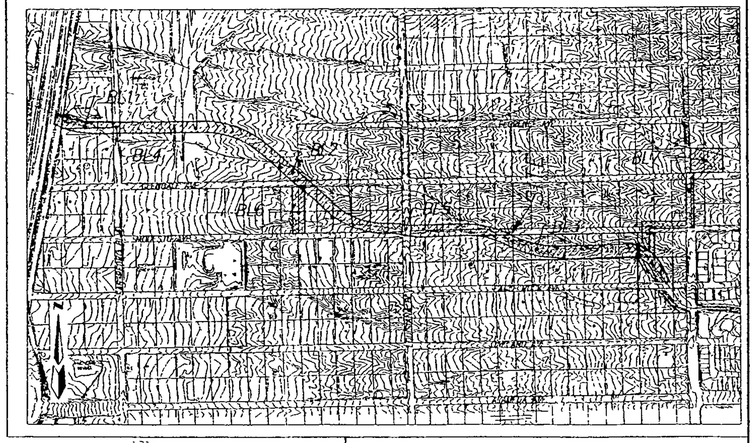
RECORD DRAWINGS

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

CONSTRUCTION PLANS FOR

LA CUEVA ARROYO
I - 25 EAST TO EAGLE ROCK AVENUE NE
AND
THE EL CAMINO ARROYO DIVERSION STORM DRAIN

ALBUQUERQUE, NEW MEXICO



VICINITY MAP — ZONE ATLAS – B-19-Z, C-19-Z
SCALE: NONE

REFERENCES:

- FINAL NORTH ALBUQUERQUE ACRES MASTER DRAINAGE PLAN OCTOBER 28, 1998 BY RTI
- LA CUEVA EL CAMINO AND NORTH CAMINO ARROYOS DRAINAGE FACILITY PLAN BY RTI, JULY, 1999
- CLOMR SUBMITTAL FOR THE LA CUEVA ARROYO, I-25 EAST TO EAGLE ROCK AVENUE NE AND THE EL CAMINO ARROYO DIVERSION STORM DRAIN PREPARED BY MARK GOODWIN AND ASSOCIATES, DECEMBER, 2001
- DRAINAGE REPORT FOR DESERT RIDGE TRAILS PREPARED BY MARK GOODWIN AND ASSOCIATES, AUGUST, 2001
- OFF-SITE DRAINAGE DESIGN REPORT FOR DESERT RIDGE TRAILS, PREPARED BY MARK GOODWIN AND ASSOCIATES, JULY, 2001

INDEX TO DRAWINGS

BID LOT	BID LOT DESCRIPTION	SHEET
–	TITLE SHEET	1
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–	TRAFFIC CONTROL PLAN	6 TO 7
–	GENERAL DETAILS	G-1 TO G-2
BL1	LA CUEVA ARROYO REACH 1	BL1-1 TO BL1-5
BL2	LA CUEVA ARROYO REACH 2	BL2-1 TO BL2-9
BL3	LA CUEVA ARROYO REACH 3	BL3-1 TO BL3-8
BL4	SAN PEDRO BOULEVARD BRIDGE	BL4-1 TO BL4-5
BL5	LOUISIANA BOULEVARD BRIDGE	BL5-1 TO BL5-6
BL6	GLENDALE EXTENSION	BL6-1 TO BL6-2
BL7	EL CAMINO DIVERSION STORMDRAIN	BL7-1 TO BL7-4
BL8	STORMWATER QUALITY FEATURES	BL8-1
–	EROSION AND SEDIMENT CONTROL PLAN	49A TO 49C
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–	MODESTO AVENUE PAVING IMPROVEMENTS	51

CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, William L. Vreeke, P.E. of the firm of Bohannan Huston, Inc., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project (La Cueva Arroyo – I25 to Eagle Rock Avenue NE and The El Camino Diversion Storm Drain - City Project No 677181) has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications approved by AMAFCA and the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction and survey information provided by the contractor, Moore and Cowart Inc and their surveyor, Will O Plotner, Jr., NMPS 14271.

Engineers Seal & Signature

WILLIAM L. VREEKE — 8131 — REGISTERED PROFESSIONAL ENGINEER — 3/12/02

APPROVED FOR CONSTRUCTION

John P. Kelly 9/10/02

JOHN P. KELLY, P.E. — DATE
EXECUTIVE ENGINEER, AMAFCA

CERTIFICATION
THE CHANGES SHOWN HEREON, MARKED BY AN ASTERISK, ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICAL AND HORIZONTAL) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Will Plotner 7/11/03

WILL W. PLOTNER JR. — NEW MEXICO — 14271 — REGISTERED PROFESSIONAL SURVEYOR

CAUTION:
NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. ALL EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE APPROXIMATE LOCATION ONLY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATIONS TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS.

DRB NO
1001068

GENERAL NOTES

NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #6.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY
5. FIVE (5) WORKING DAYS PRIOR TO BEGINNING OF CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION COORDINATION ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS
6. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO THE SAME LOCATION AS WAS EXISTING OR AS INDICATED BY THIS PLAN SET
7. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT TO COVER THE NEW GRADE UNLESS OTHERWISE SPECIFIED REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS
8. CONTRACTOR SHALL RECORD DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS CONSTRUCTED" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAVE BEEN RECORDED
9. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE CONTRACTOR SHALL PROMPTLY REMOVE ANY GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY
10. CONTRACTOR SHALL COORDINATE WITH THE CITY OF ALBUQUERQUE WATER SYSTEMS DIVISION (857-8200) FIVE (5) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING PUBLIC WATER OR SEWER UTILITIES EXISTING VALVES TO BE OPERATED BY CITY PERSONNEL ONLY. CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION THREE (3) WORKING DAYS PRIOR TO NEEDING VALVES TURNED ON OR OFF.
11. FOR STORM DRAIN CONSTRUCTION, RCP PIPE JOINTS SHALL NOT BE GROUTED PRIOR TO FINAL INSPECTION FINAL INSPECTION WILL DETERMINE JOINTS TO BE GROUTED FOR FINAL ACCEPTANCE OF THE CONSTRUCTION.

dmg — D MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS, P O BOX 90606, ALBUQUERQUE, NEW MEXICO 87199, (505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

REV	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

ENGINEERS STAMP & SIGNATURE — MARK GOODWIN — NEW MEXICO — 14271 — REGISTERED PROFESSIONAL ENGINEER — 2-21-02

2-11-02
3-18-02

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		9/12/02
TRANSPORTATION		2-21-02
WATER/WASTEWATER		2-21-02
HYDROLOGY		1-31-02
CIP		
CONSTR MNGMT		
CONSTR COORD		1-31-02

APPROVED FOR CONSTRUCTION

CITY ENGINEER — DATE 9/12/02

CITY PROJECT NO 677181

SHEET 1 OF 49 51

A00129 \P\CHANNEL\TITLE\01-03-02\ MJR\RDQ\GJK

RECORD DRAWINGS

NOTES

1 ALL WORK MUST BE CONDUCTED WITHIN THE AREA FENCED AND FLAGGED BETWEEN I-25 AND LOUISIANA BOULEVARD

Flood Plain Limits

Sandia Pueblo Property

(65.4573 Acres Flood Zone)

CORONADO AIRPORT

SAN DIEGO AVENUE N.E.

SPORTS COMPLEX

INTERSTATE 25

AMAFCA DRAINAGE EASEMENT

50' TCE

EL CAMINO ARROYO

Proposed ℄ of La Cueva Channel

FLORENCE AVENUE N.E.

GRADING TCE

LA CUEVA ARROYO

(66.4981 Acres Flood Zone)

LOT 23, BLOCK 24, TRACT A, UNIT B, NORTH ALBUQUERQUE ACRES

25' AMAFCA DRAINAGE & SUBORDINATE MULTI-USE RECREATION TRAIL EASEMENT

TCE
LOTS 16 & 17, BLOCK 25
TRACT A, UNIT B, NORTH
ALBUQUERQUE ACRES

PUBLIC DRAINAGE EASEMENT
LOTS 21 & 32, BLOCK 11
TRACT 1, UNIT 3, NORTH
ALBUQUERQUE ACRES
SEDIMENT POND FOR
EL CAMINO DIVERSION

WYOMING BOULEVARD N.E.

GLENDALE AVENUE N.E.

TCE
EXISTING FLOODPLAIN

75' AMAFCA DRAINAGE EASMENT

La Cueva Channel

EXISTING CEMETERY

SAN PEDRO DRIVE N.E.

30' PUBLIC WATERLINE ESMT

TCE
LOT 26, BLOCK 8, UNIT1
DESERT RIDGE TRAILS

15' PUBLIC WATERLINE ESMT

MODESTO AVENUE N.E.

EXISTING CEMETERY

CONVENIENCE CENTER

25' OFFSITE GRADING EASEMENT

DRAINAGE EASMENT

LOUISIANA BOULEVARD N.E.

EAGLE ROCK ESTATES UNIT 1

MISTA DEL AGUILA

EAGLE ROCK AVE N.E.

TCE
TRACT A, UNIT 1
DESERT RIDGE TRAILS

OAKLAND AVE N.E

30' PUBLIC DRAINAGE & LANDSCAPE EASEMENT

A.M.A.F.C.A. Property

Nor Este

LA CUEVA CHANNEL

EL CAMINO ARROYO

30+00 35+00 40+00 45+00 50+00 55+00 60+00 65+00 70+00

LEGEND

- FLOODPLAIN LIMITS
- CHANNEL RIGHT-OF-WAY
- PUBLIC DRAINAGE EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT (TCE)
- AMAFCA DRAINAGE EASEMENT

N

300' 150' 0 300' 600'

SCALE: 1" = 300'

LA CUEVA ARROYO

AS BUILT INFORMATION

CONTRACTOR Mesa Construction DATE 1/03
WORK STARTED ON 8/5/02 DATE 8/5/02
INSPECTED BY BHT DATE 1/03
FIELD VERIFIED BY Carpenter DATE 1/03
AS-BUILTS COMPILED BY Carpenter DATE 1/03
MICRO-FILM INFORMATION
DATE
RECORDED BY
NO

BENCH MARKS

"I-820", THE STATION IS LOCATED 9 MILES N.E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "I-820", X = 410,237.56, Y = 1,524,092.46, C-G = 9996740 DELTA ALPHA = 0°10'23" CENTRAL ZONE, (NAD 1927) ELEVATION = 5474.510' (SLD 1929)

SURVEY INFORMATION

FIELD NOTES

NO	BY	DATE

ENGINEER'S SEAL

REMARKS / REVISIONS

NO	DATE	BY
DESIGN		DATE 11/01
DESIGNED BY GK		DATE 11/01
DRAWN BY RDQ		DATE 11/01
CHECKED BY DMG		

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

LA CUEVA ARROYO

TITLE

OVERALL SITE MAP

DESIGN REVIEW COMMITTEE APPROVAL — SEP 12 2002

CITY ENGINEER APPROVAL — SEP 12 —

LAST DESIGN UPDATE

NO. DATE/BY NO. DATE/BY

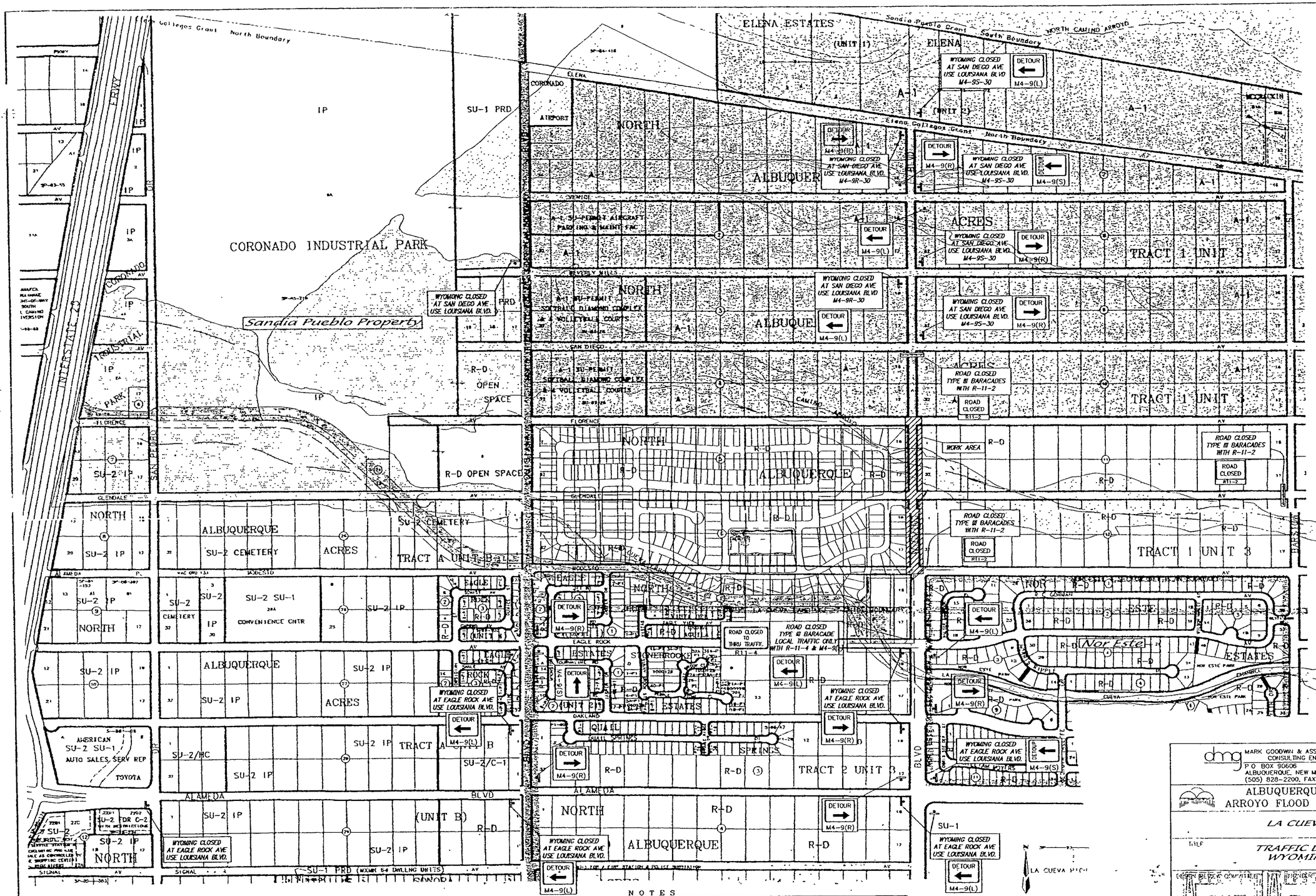
CITY PROJECT NO 677181

ZONE MAP NO C-19-Z

SHEET 2 OF 51 49

A0129WP/CHANNEL/BASE30 DWG/03/07/02 RDQ WHM

RECORD DRAWINGS



NOTES

1 SAN PEDRO MAY BE CLOSED AT ANY TIME DURING THE COURSE OF THE PROJECT
2 EITHER LOUISIANA BOULEVARD OR WYOMING BOULEVARD MAY BE CLOSED DURING THE COURSE OF THIS PROJECT, HOWEVER, THE OTHER SHALL BE OPEN TO UNIMPEDED TRAFFIC

A0129WP/CHANNEL/TRAFFIC-BASE/03-04-02/ MJR NHM

AS BUILT INFORMATION

CONTRACTOR: MODEL PAVEMENT CONTRACTING DATE 7/23
STAKED BY: SURVEY INC. DATE 1/23
FIELD BOOK: 1 BY: DHE DATE 1/23
CONSTRUCTION STAKING BY: SURVEY INC. DATE 7/23
DATE
CONSTRUCTION BY: GENERAL DATE 7/23
DRAWING CORRECTED BY: GENERAL DATE 7/23

MICRO-FILM INFORMATION

RECORDED BY
NO

BENCH MARKS

"I-B20", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE, TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT OF THE INTERSECTION. STATION MARK IS A STANDARD AGS BRASS TABLET, STAMPED "I-B20", X = 410,237.56, Y = 1,534,092.46, G-G = .99994470 (DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927) ELEVATION = 5474.510' (SLD 1929)

SURVEY INFORMATION

FIELD NOTES

NO	BY	DATE

ENGINEER'S SEAL

REMARKS / REVISIONS / DESIGN

NO.	DATE		BY
		DESIGNED BY	GIC
		DRAWN BY	RDG
		CHECKED BY	DMG

DATE 11/01
DATE 11/01
DATE 11/01

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P O BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

LA CUEVA ARROYO

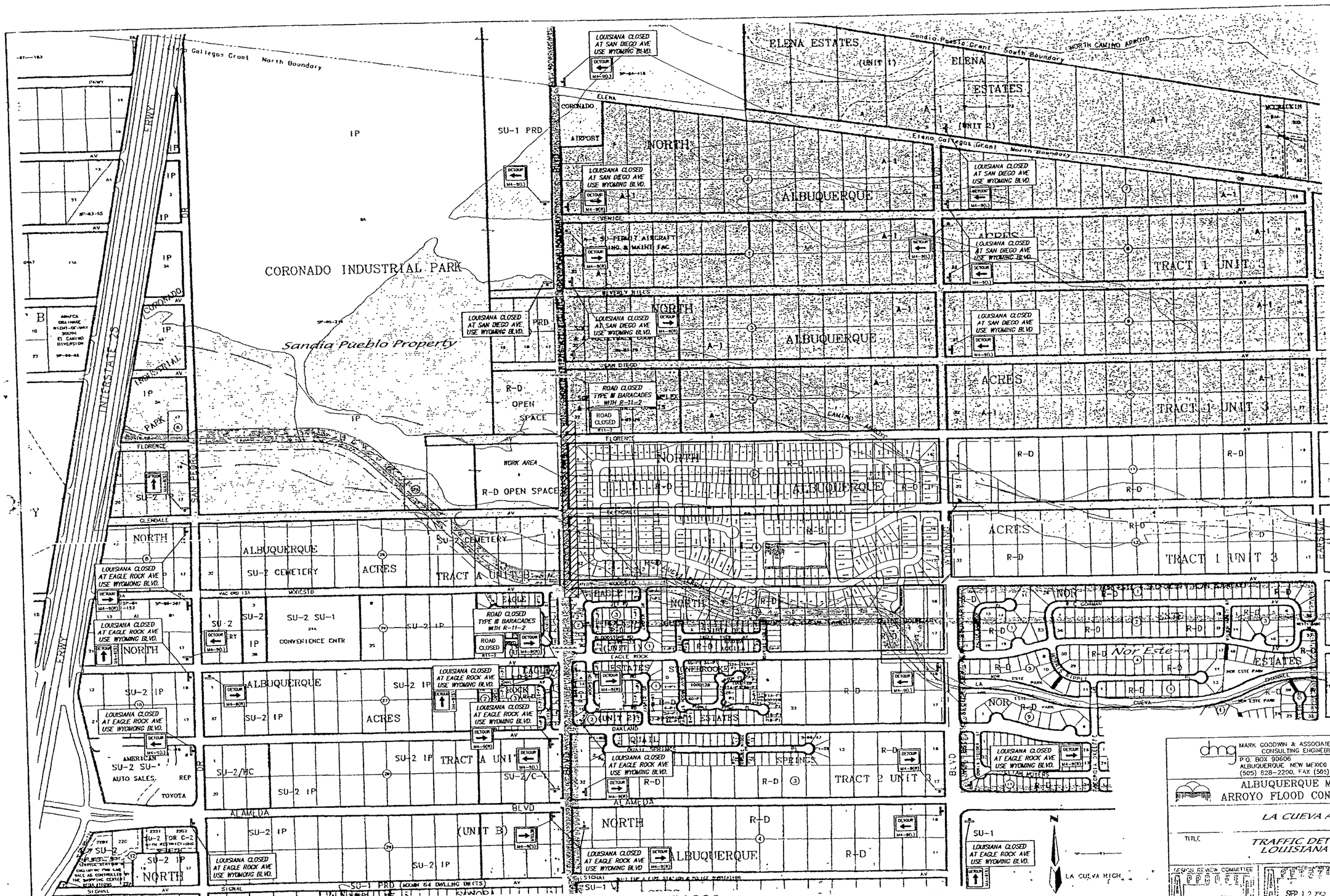
TITLE: TRAFFIC DETOUR PLAN WYOMING DETOUR

DESIGN REVIEW COMMITTEE: SEP 1 2003 — BOARD APPROVAL: SEP 12 2003

NO. DATE/YR — NO. DATE/YR — LAST DESIGN UPDATE

CITY PROJECT NO: 677181
ZONE MAP NO: C-19-Z
SHEET OF: 3 49

RECORD DRAWINGS



NOTES

1. SAN PEDRO MAY BE CLOSED AT ANY TIME DURING THE COURSE OF THE PROJECT
2. EITHER LOUISIANA BOULEVARD OR WYOMING BOULEVARD MAY BE CLOSED DURING THE COURSE OF THIS PROJECT, HOWEVER, THE OTHER SHALL BE OPEN TO UNIMPEDED TRAFFIC

SCALE: 1" = 300'

A0129WP/CHANNEL/TRAFFIC-BASE-2/03-04-02/ MJR NHM

SURVEY INFORMATION
FIELD NOTES BY
NO | DATE

AS BUILT INFORMATION
BENCH MARKS
1-B20, THE STATION IS LOCATED 3 MILES N. E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. TO VALE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT
STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED 1-B20 X = 410,237.56, Y = 1,534,092.45, C-G = 99984740
DELTA ALPHA = 010°23', CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510' (SLD 1929)
CONTRACTOR (PRIME & SUBCONTRACTORS) DATE
MARK
INSPECTORS
ALBUQUERQUE DIVISION
CITY/COUNTY
DESIGNED BY
DRAWN BY
CHECKED BY
MICRO-FILM INFORMATION
RECORDED BY
NO

ENGINEER'S SEAL

NO	DATE	REMARKS	BY
		DESIGNED BY	GK
		DRAWN BY	RDQ
		CHECKED BY	DMG
	DATE	REVISIONS	
	11/01	DESIGN	
	11/01		
	11/01		

dmg
MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

LA CUEVA ARROYO

TITLE: TRAFFIC DETOUR PLAN LOUISIANA DETOUR

DESIGN REVIEW COMMITTEE — SEP 12 2002
CITY ENGINEER — SEP 12 2002
AS-BUILT — MO/DA/YR
CITY PROJECT NO 677181
ZONE MAP NO C-19-Z
SHEET 4 OF 51 49

RECORD DRAWINGS

N

NOTES

1. SAN PEDRO MAY BE CLOSED AT ANY TIME DURING THE COURSE OF THE PROJECT.
2. EITHER LOUISIANA BOULEVARD OR WYOMING BOULEVARD MAY BE CLOSED DURING THE COURSE OF THIS PROJECT, HOWEVER, THE OTHER SHALL BE OPEN TO UNIMPEDED TRAFFIC.

SCALE: 1" = 300'

AS BUILT INFORMATION

CONTRACTOR: DAVE + CONRAD CONTRACTORS — DATE 7/03

WORK PERFORMED BY: DAVE + CONRAD CONTRACTORS — DATE 7/03

INSPECTORS: BART — DATE 7/03

SURVEYED BY: CLARKSON LAND SURVEYING — DATE 7/03

SURVEYED BY: CLARKSON LAND SURVEYING — DATE 7/03

BENCH MARKS

STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "I-820", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. TO MILE 10 BARSTOW ST., THEN NORTH ON BARSTOW ST. TO MILE TO MODESTO AVE., THE STA IS LOCATED IN THE N.E. QUADRANT

MICRO-FILM INFORMATION

STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "I-820", Y = 1,324,082.46, E-G = .99964740

DELTA ALPHA = 0°01'23" CENTRAL ZONE, (NAD 1927)

ELEVATION = 5474.510 (SLD 1929)

SURVEY INFORMATION

FIELD NOTES BY — DATE

NO — DATE — REMARKS — BY

REVISIONS — DESIGN — DATE 11/01

DESIGNED BY GJK — DATE 11/01

DRAWN BY RDQ — DATE 11/01

CHECKED BY DMG

RECORDED BY — DATE

NO

ENGINEER'S SEAL

dmg MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200 FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

LA CUEVA ARROYO

TITLE: TRAFFIC DETOUR PLAN SAN PEDRO DETOUR

REVIEWED FOR CONFORMANCE — APPROVED AS PER — SEP 12 2003 — CITY ENGINEER — LAST DESIGN UPDATE — NO. DATE/BY — NO. DATE/BY

CITY PROJECT NO 677181 — ZONE MAP NO C-19-Z — SHEET 5 OF 51 ~~49~~

AC129WP/CHANGE_/TRAFFIC-BASE-3/03-04-02/ MJR NHM

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.

2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPERATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.

3 THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY

4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION

5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES

6 ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION

7 THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT

8 CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION

9 ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE

10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.

11. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION

12. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION

13 CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.

14. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING

15 CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES

16 CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.

17. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

⚠ 18. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY, POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

19. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY THE PROJECT MANAGER.

20. EXCAVATIONS SHALL BE PLATED TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS

21. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
1 STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION
2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.

22. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.

23. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION, WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.

24. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC

⚠ 25 ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.

⚠ 26. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPTMENT, BOTH PERMANENT AND TEMPORARY.

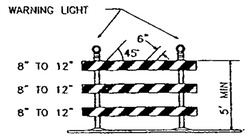
27. ALL LANE AND ROAD CLOSURES ON LOUISIANA BLVD. AND WYOMING BLVD. AND SAN PEDRO DRIVE ARE SUBJECT TO ARTERIAL/COLLECTOR ROAD USAGE FEES OF $0.01 PER SQUARE FOOT OF BARRICADED AREA PER DAY, WITH A $21.00 PER DAY MINIMUM FOR TOTAL ROAD CLOSURES, THE COST IS BASED ON THE TOTAL WIDTH OF THE ROAD TIMES THE LENGTH OF THE ROAD CLOSED. SHOULDER BARRICADING ON ARTERIAL OR COLLECTOR ROADWAYS IS SUBJECT TO BARRICADING FEES OF $21.00 PER DAY.

28 NO WORK WILL BE ALLOWED ON WYOMING BLVD. UNLESS LOUISIANA BLVD. IS COMPLETELY OPEN TO TWO-WAY TRAFFIC WITHOUT BARRICADES.

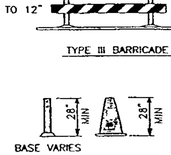
29 NO WORK WILL BE ALLOWED ON LOUISIANA BLVD. UNLESS WYOMING BLVD. IS COMPLETELY OPEN TO TWO-WAY TRAFFIC WITHOUT BARRICADES

30 TOTAL ROAD CLOSURES OF EITHER LOUISIANA BLVD OR WYOMING BLVD. WILL REQUIRE EXTENDED HOUR CONSTRUCTION FROM 7.00 AM TO 10:00 PM UNTIL THE WORK IS COMPLETED.

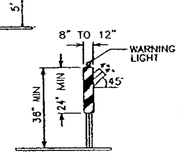
31 TOTAL ROAD CLOSURES OF EXISTING LOCAL ROADS, SUCH AS FLORENCE AVENUE, ARE SUBJECT TO BARRICADE FEES OF $21.00 PER DAY



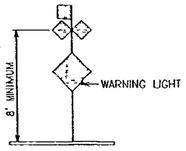
TYPE III BARRICADE



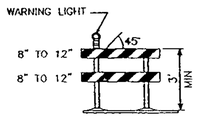
CONES



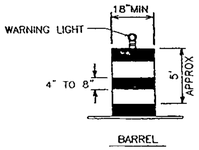
VERTICAL PANEL



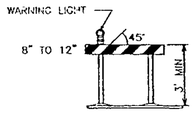
HIGH LEVEL WARNING DEVICE



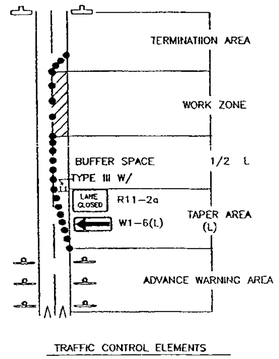
TYPE II BARRICADE COLLAPSIBLE



BARREL



TYPE I BARRICADE COLLAPSIBLE



TRAFFIC CONTROL ELEMENTS

LEGEND

- WORK AREA
- BARRICADE - TYPE I, TYPE II, OR BARREL
- BARRICADE - TYPE III
- VERTICAL PANEL
- WARNING SIGN
- D DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION
- S SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET EQUAL TO THE STREET LIMIT OF THE STREET
- L TAPER LENGTH - SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET

TAPER REQUIREMENT

SPEED LIMIT (MPH)	TAPER LENGTH(L) (FEET) 10' LANE	11' LANE	12' LANE	MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

SPEED MILES PER HOUR	MINIMUM DISTANCE IN FEET BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

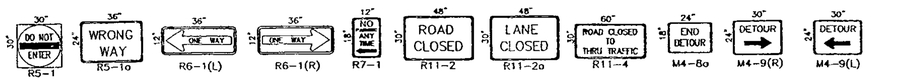
SIGN FACE DETAILS

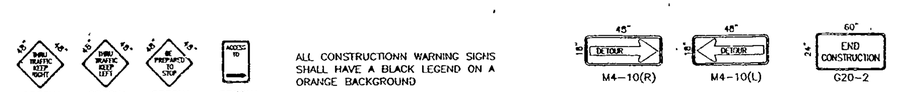












ALL CONSTRUCTIONN WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND

TAPER CRITERIA

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
40 MPH OR GREATER	$L = W \times S$

L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

AS-BUILT INFORMATION
CONTRACTOR HOUSE & CANVAS INSURANCE 1/03
SURVEY INFORMATION BENCH MARKS
FIELD NOTES BY CARTESIAN SURVEYS DATE 7/01
DRAWINGS BY RNF DATE 7/01
FIELD VERIFICATION BY CARTESIAN SURVEYS DATE 7/01
CORRECTED BY CARTESIAN SURVEYS DATE 1/04
MICRO-FILM INFORMATION
RECORDED BY DATE
NO. DATE BY REMARKS

NO	DATE	BY	REVISIONS
6	9/25/97	J.D.L.	ADD NOTE NO 27
5	9/24/97	J.D.L.	REVISED NOTE NO 26
4	9/24/97	J.D.L.	REVISED NOTE NO. 19
3	9/24/97	J.D.L.	REVISED NOTE NO. 11
2			DESIGN
1			DESIGNED BY BOHANNAN HUSTON DATE 5-97
			DRAWN BY BOHANNAN HUSTON DATE 5-97
			CHECKED BY BOHANNAN HUSTON DATE 5-97

ENGINEER'S SEAL

C.O.A. STANDARD

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: *LA CUEVA ARROYO TRAFFIC CONTROL*

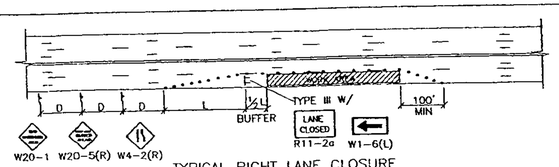
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR	MO./DAY/YR.
C.O.A. STANDARD	C.O.A. STANDARD			

CITY PROJECT NO 677181 | ZONE MAP NO C-19-Z | SHEET 6 OF 51 49

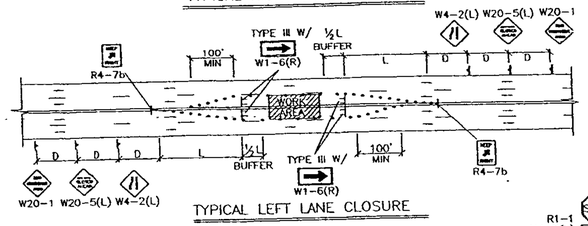
[DHI-MAIN\PROJECTS\971771\TRANS\DESIGN\SIGNAL\CITYSIGN.DWG

CITYSIGN DWG 6-11-97

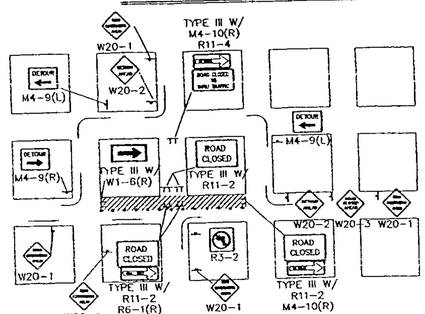
RECORD DRAWINGS



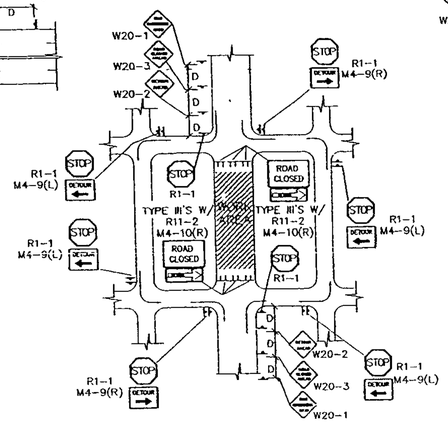
TYPICAL RIGHT LANE CLOSURE



TYPICAL LEFT LANE CLOSURE

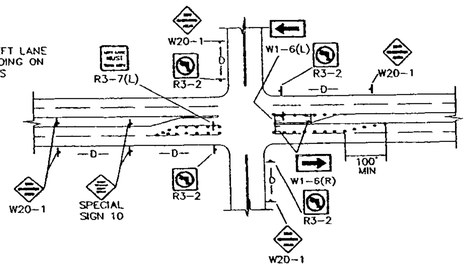


TYPICAL ONE DIRECTION DETOUR



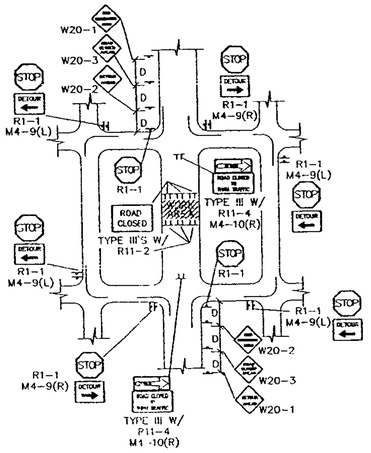
TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS



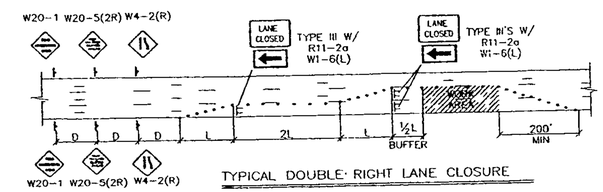
TYPICAL LANE CLOSURE AT INTERSECTION

NOTE DEPENDING ON WORK ZONE LOCATION

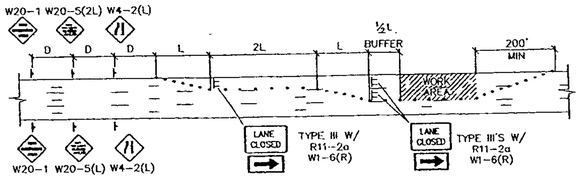


TYPICAL MID-BLOCK CLOSURE

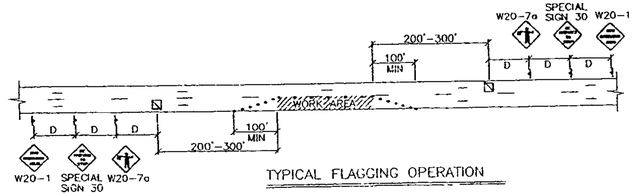
NOTE (R1-1) BASED ON FIELD CONDITIONS.



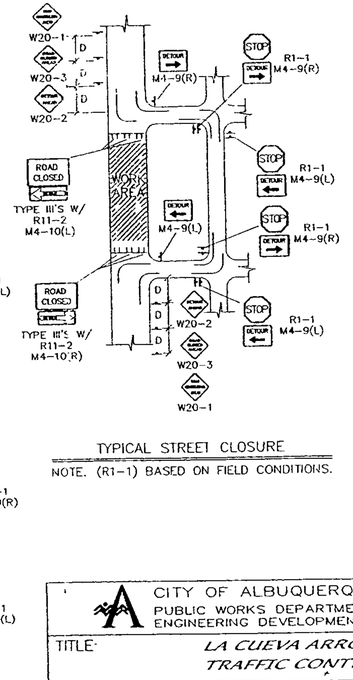
TYPICAL DOUBLE RIGHT LANE CLOSURE



TYPICAL DOUBLE LEFT LANE CLOSURE



TYPICAL FLAGGING OPERATION

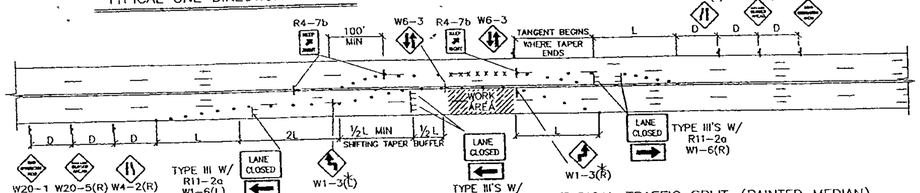


TYPICAL STREET CLOSURE

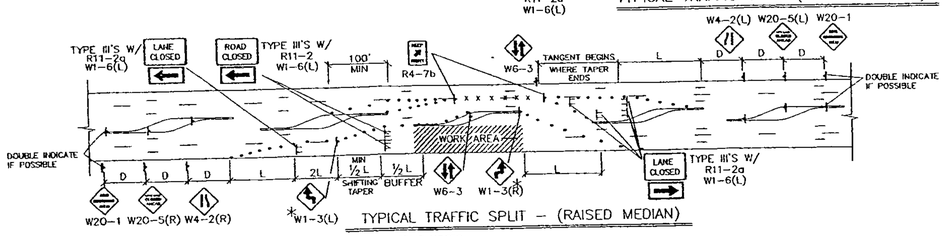
NOTE (R1-1) BASED ON FIELD CONDITIONS

TYPICAL STREET CLOSURE

NOTE. (R1-1) BASED ON FIELD CONDITIONS.



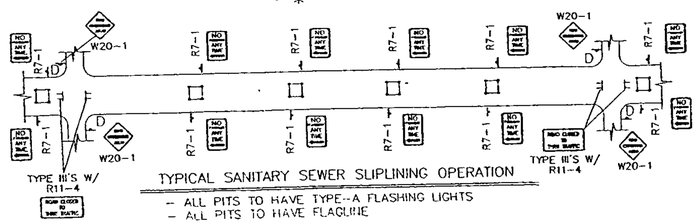
TYPICAL TRAFFIC SPLIT--(PAINTED MEDIAN)



TYPICAL TRAFFIC SPLIT – (RAISED MEDIAN)

TRAFFIC SPLIT NOTES

1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCES SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS
2. 1/2 L IS THE MINIMUM DISTANCE FOR SHIFTING TAPERS
3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED
4. MEDIAN REMOVAL SHALL BE REQUIRED IF 1/2 L OR REVERSE CURVE IS NOT SUFFICIENT. MEDIAN REMOVAL SHALL TAKE PLACE BEFORE SPLITS
5. REDUCED SPEED MAY BE CONSIDERED
6. * USE W1-3 FOR 30 MPH OR LESS, W1-4 FOR SPEED 35 MPH OR GREATER



TYPICAL SANITARY SEWER SUPLINING OPERATION

- ALL PITS TO HAVE TYPE--A FLASHING LIGHTS
- ALL PITS TO HAVE FLAGLINE

GENERAL NOTE:

ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND

⚠ ALL ADVANCE WARNING SIGNS SHALL BE A MINIMUM OF 36" THIRTY SIX INCHES BY 36" THIRTY SIX INCHES IN SIZE AND SHALL HAVE ONE WARNING LIGHT

AS-BUILT INFORMATION
CONTRACTOR "NAME" DATE 7/93
STAKED BY CARTESIAN SURVEYS, INC. DATE 7/93
AS-BUILTED BY RITE DATE 7/93
INSPECTED BY CARTESIAN SURVEYS, INC. DATE 7/93
REVIEWED BY CARTESIAN SURVEYS, INC. DATE 7/93

MICRO-FILM INFORMATION
DATE
RECORDED BY
NO

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES
NO. DATE BY

ENGINEER'S SEAL

C.O.A. STANDARD

NO.	DATE	REMARKS	BY
		REVISIONS	J.O.L.
⚠ 1	9/24/97	REVISED GENERAL NOTE	
		DESIGN	DATE 5-97
		DESIGNED BY BOHANNAN HUSTON	DATE 5-97
		DRAWN BY BOHANNAN HUSTON	DATE 5-97
		CHECKED BY BOHANNAN HUSTON	

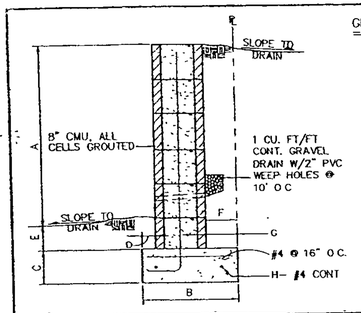
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: LA CUEVA ARROYO TRAFFIC CONTROL

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	NO./DAY/YR.
C.O.A. STANDARD	C.O.A. STANDARD			

CITY PROJECT NO 677181 | ZONE MAP NO C-19-Z | SHEET 7 OF 51/49

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CITYTRAF.DWG 6-11-97



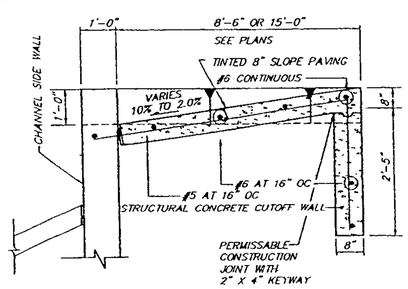
GENERAL NOTES:

1. ALL WALLS ARE TO HAVE 12" CMU PILASTERS @ 10'-0" O C PLACE NO 4 s IN EACH CELL. FILL ALL CELLS WITH CONCRETE.
2. ALL CONCRETE IS TO BE 3000 PSI.
3. MINIMUM COMPACTION UNDER FOOTINGS IS TO BE 95% PER ASTM D 1557 FOR A DEPTH OF 12" MOISTURE CONTENT IS TO BE + 2 0%.
4. BACK FILL AGAINST WALLS IS TO BE HAND-PLACED AND COMPACTED.
5. ALL BARS ARE TO BE GRADE 60, ASTM 615
6. TRUSS TYPE DUR-O-WALL EVERY OTHER COURSE
7. TOP COURSE SHALL BE AN 8x8x16" BOND BEAM WITH CONTINUOUS #4 REBAR FOR WALLS 2'-0" OR GREATER
8. EXPANSION JOINTS SHALL BE INSTALLED @ 15'-0" O.C. W/ 3/8" BEAD OF SONOPLASTIC NP-1 EACH FACE.
9. VERTICAL REINFORCEMENTS SHALL BE PLACED IN EACH CELL ADJACENT TO JOINT (EACH SIDE)

A	B	C	D	E	F	G	H
1'-6"	2'-0"	10"	8"	8"	8"	#4@24" OC	2
2'-0"	2'-0"	10"	8"	8"	8"	#4@24" OC	2
3'-0"	2'-4"	10"	8"	8"	1'-0"	#4@16" OC	2
4'-0"	2'-9"	10"	8"	10"	1'-3"	#4@16" OC	2
5'-0"	3'-2"	10"	8"	1'-2"	1'-4"	#4@16" OC	2

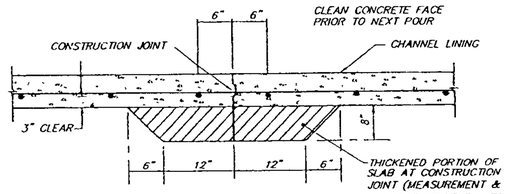
RETAINING WALL DETAIL (BY OTHERS)

(STA. 66+15.15 RT - 66+84.69 RT) SCALE: NONE



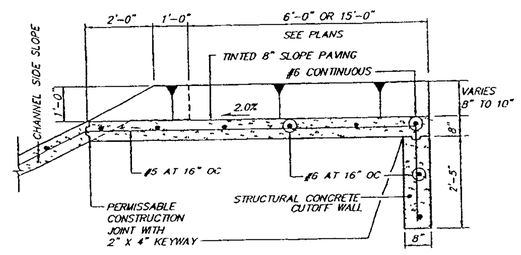
SECTION A-A

SCALE. NONE



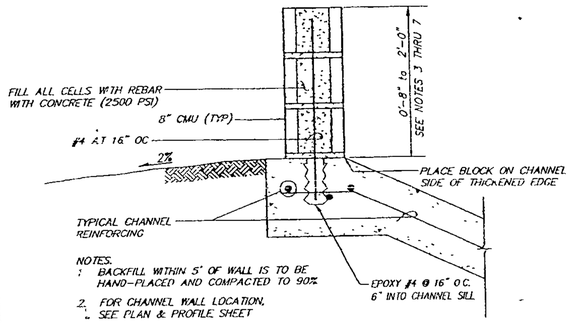
CONSTRUCTION JOINT DETAIL

AS REQUIRED BY CHANNEL CONSTRUCTION SCALE NONE



SECTION A-A

SCALE NONE

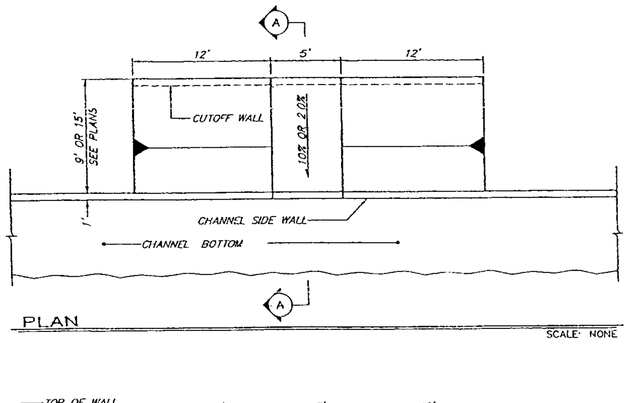


NOTES.

1. BACKFILL WITHIN 5' OF WALL IS TO BE HAND-PLACED AND COMPACTED TO 90%
2. FOR CHANNEL WALL LOCATION, SEE PLAN & PROFILE SHEET
3. ~~1'-4" WALL FROM STA 48+68.84 TO 56+15.13 LT AND FROM STA 52+78.13 TO 61+01.51 RT~~
4. ~~2'-0" WALL FROM STA. 12+25.00 TO 14+15.00 RT. FROM STA 43+55.00 TO 48+39.84 LT. AND FROM STA 64+59.83 TO 65+74.83 LT~~
5. ~~0'-8" WALL FROM 56+44.61 TO 64+59.83 LT AND FROM STA. 61+30.49 TO 68+50.00 RT~~
6. TOP COURSE SHALL BE AN 8x8x16 BOND BEAM WITH CONTINUOUS #4 REBAR FOR WALLS 2'-0" OR GREATER

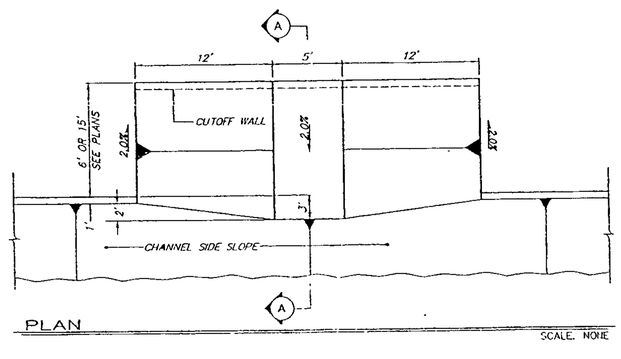
CHANNEL WALL SUPERELEVATION

SCALE NONE



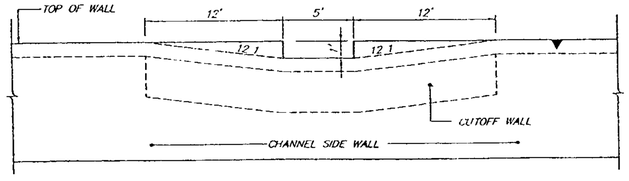
PLAN

SCALE. NONE



PLAN

SCALE. NONE



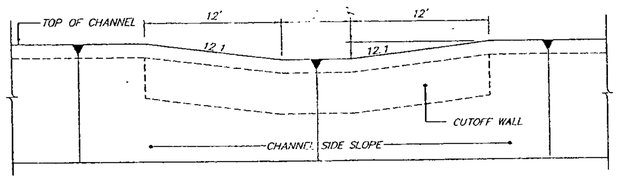
PROFILE

SCALE. NONE

CHANNEL RUNDOWN DETAILS- VERTICAL WALL

STA. 10+50.00 RT. & STA. 10+50.00 LT.

NOTE. SEE PLAN & PROFILE SHEETS FOR APPROPRIATE SPOT ELEVATIONS.



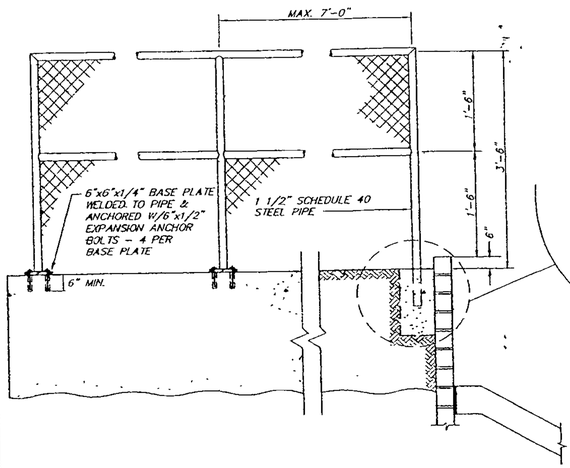
PROFILE

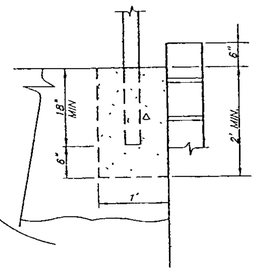
SCALE NONE

CHANNEL RUNDOWN DETAILS- CHANNEL SIDE SLOPE

NOTE SEE PLAN & PROFILE SHEETS FOR APPROPRIATE SPOT ELEVATIONS.

56+29.50 LT.
61+15.99 RT
66+90.76 RT



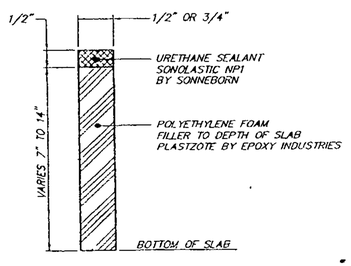


HANDRAIL NOTES

1. All posts, rails, plates, angles, bolts, etc... Shall be of structural steel and painted Wellborn Hazel Nut Brown
2. Install chain link fabric on outside of pipe rail
3. Tension wire shall be 7 ga. spring steel w/11 ga. wire ties @ 24" ± c.c.
4. Tension bars and (3) clamps at each corner post
5. Tack weld chain link fabric @ 3 points along each frame member.
6. Paint all field welds with galvanizing coating
7. All joints are welded.

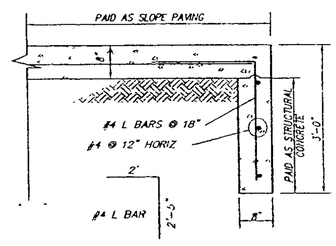
STANDARD HANDRAIL DETAIL

BY OWNER SCALE NONE



EXPANSION JOINT DETAIL

NTS



CUT-OFF WALL

STA. 68+50.00

NTS

A00129W7\CHANNEL\DETAIL_1\04-11-02\ MJP HWY RDO

F \A00\006\A0129W\CHANNEL\DETAIL_1.dwg Fri Apr 12 08:30:19 2002 by dmg

AS BUILT INFORMATION

BENCH MARKS

SURVEY INFORMATION

FIELD NOTES BY DATE

CONTRACTOR MAKES + CHANGE (attached)

WORK DONE BY CASTERMAN SURVEY DATE 7/01

INSPECTOR'S BHI DATE 7/03

AS-BUILTS PREPARED BY JACKSON DATE 7/03

VERIFIED BY MARK GOODWIN, P.E. DATE 7/03

CORRECTED BY MARK GOODWIN, P.E. DATE 7/03

MICRO-STATION INFORMATION

RECORDED BY

NO

"I-820", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST., 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT

STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "I-820", X = 410,237.56, Y = 1,524,092.46, G-G = .99984740

DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)

ELEVATION = 5474.510' (SLD 1929)

ENGINEER'S SEAL

MARK GOODWIN NEW MEXICO 9844 REGISTERED PROFESSIONAL ENGINEER 2/19/03

NO	DATE	REMARKS REVISIONS	BY
		DESIGN	
		DESIGNED BY GJK	DATE 10/01
		DRAWN BY MJR RDQ	DATE 10/01
		CHECKED BY DMG	DATE 10/01

dmg MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS
P O BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

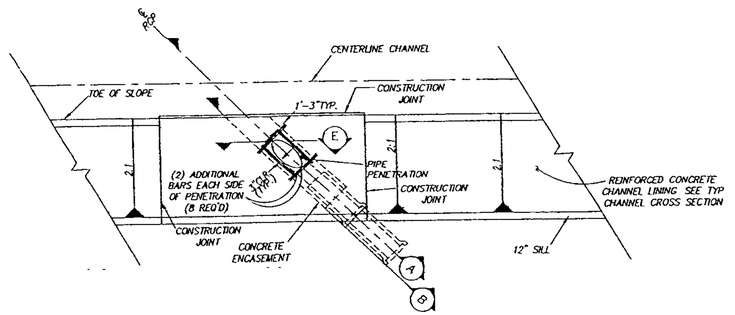
LA CUEVA ARROYO

TITLE

GENERAL DETAILS

DESIGN ENGINEER APPROVAL	CITY ENGINEER APPROVAL	NO /DAY/YR	NO /DAY/YR
SEP 1 2 2002	SEP 1 2 2002		
		LAST AS-BUILT UPDATE	

CITY PROJECT NO | ZONE MAP NO C-19-Z | SHEET G-1

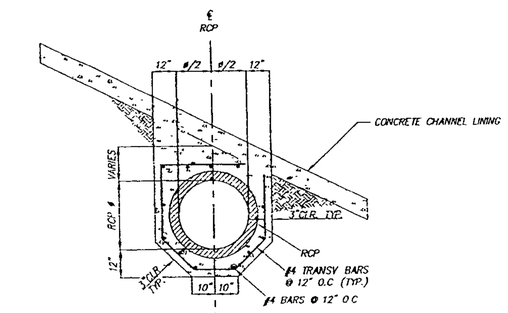


NOTE: CUT TYPICAL CHANNEL REINFORCING @ RCP PENETRATION. FIELD BEND CUT-BARS INTO CONCRETE ENCASEMENT 1'-3" MAINTAIN 3" CLR. (MIN) ON ALL SIDES.

TYPICAL PIPE PENETRATION (PLAN. VIEW)

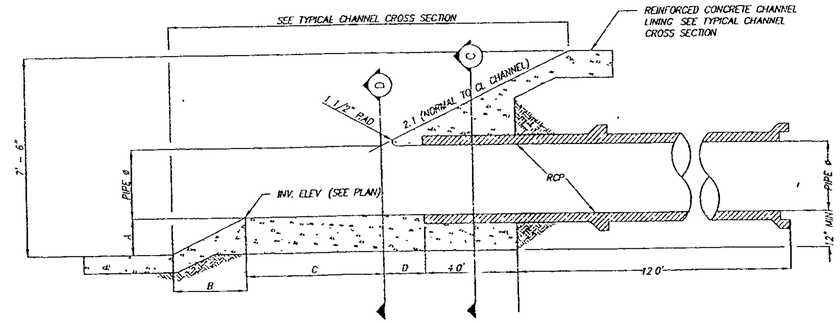
N.T.S.

TABLE OF DIMENSIONS									
CHANNEL STATION	PIPE DIAMETER	SLOPE	SKEW	CHANNEL DEPTH	INVERT TO INVERT A	B	C	D
14+38.86 RT	4.5	0.39	60°	8.0	0.0	0.0	9.20	3.0
14+40.00 LT	4.5	1.00	45°	8.0	1.0	2.0	9.20	3.0
15+86.92 LT	4.5	1.00	90°	7.5-8.0	0.0	0.0	9.20	3.0
19+00.00 LT & RT	2.0	1.00	45°	7.5-8.0	1.0	2.0	7.07	3.0
27+00.00 LT & RT	2.0	1.00	45°	7.5-8.0	1.0	2.0	7.07	3.0
32+00.00 LT & RT	2.0	1.00	45°	7.5-8.0	1.0	2.0	7.07	3.0
43+50.00 RT	5.5	1.36	45°	7.5-8.0	0.0	0.0	9.20	3.0
43+75.00 LT	5.0	2.40	45°	7.5-8.0	0.0	0.0	9.70	3.0
50+88.93 LT	2.5	1.97	45°	7.5-7.7	0.0	0.0	7.07	3.0
52+37.38 RT	2.0	1.81	45°	7.5-7.7	1.0	2.0	7.07	3.0
60+66.35 RT	2.5	0.40	45°	7.5-7.7	0.0	0.0	7.07	3.0
	FEET	PERCENT	DEGREES	FEET	FEET	FEET	FEET	FEET



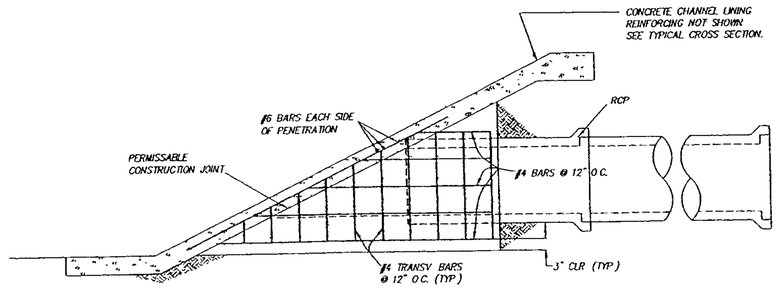
SECTION C — C

N.T.S.



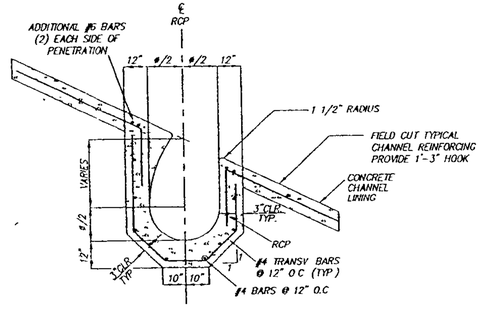
SECTION A — A

N.T.S



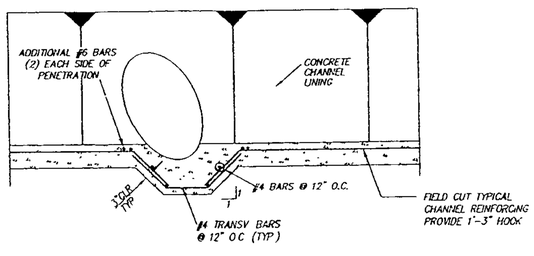
SECTION B — B

N.T.S



SECTION D — D

N.T.S

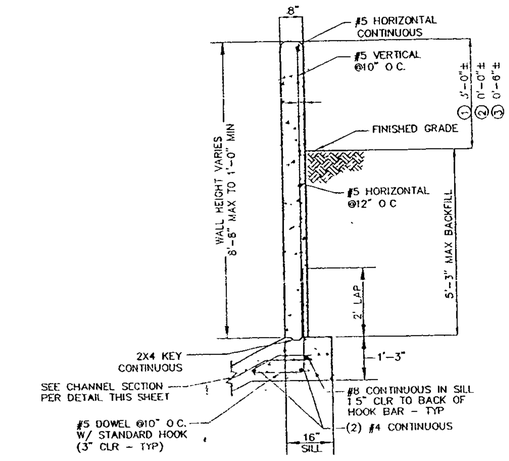


SECTION E — E

N.T.S

NOTES

1. THE PIPE PENETRATION DETAILED HEREIN SHALL BE PAID FOR UNDER PIPE PENETRATION, (EACH) AND SHALL BE COMPENSATED FOR THE PENETRATION COMPLETE AND IN PLACE, INCLUDED IN THIS WORK (BUT NOT LIMITED TO) IS GRADING, SUBGRADE PREPARATION, REINFORCED CONCRETE, CONSTRUCTION JOINTS, CONCRETE PLACEMENT, 16" OF PROPER SIZE RCP, PRECAST PLUG IF NO CONNECTION IS MADE WITH THIS PROJECT, BACKFILL, AND FINISHING NOTE THE MEASUREMENT FOR CONCRETE CHANNEL LINING IS CONTINUOUS AND UNINTERRUPTED AT THE PENETRATION LOCATION
2. THE TYPICAL TRANSVERSE AND LONGITUDINAL REINFORCEMENT SHALL BE CONTINUOUS THRU THE CONSTRUCTION JOINT LAPPED BAR SPLICES ADJACENT TO THE JOINT IS PERMITTED
   #3 BAR LAP = 1'-2"
   #7 BAR LAP = 3'-2"
   #5 BAR LAP = 2'-2"



TYPICAL RETAINING WALL SECTION

NOT TO SCALE

Follow Notes on Plan:
- (2) STA 10+68.89 TO STA 12+75.00 RT
- (1) STA 38+05.0 TO STA 44+72.00 RT
- (3) STA 45+13.12 TO STA 46+75.00 LT
- (2) STA 45+13.12 TO STA 46+75.00 RT
- (3) STA 46+75.00 TO STA 49+78.43 RT
- (3) STA 65+74.83 TO STA 66+99.15 LT
- (2) STA 67+05.80 TO STA 68+50.00 LT

NOTE

1. WALL SHALL BE 4,000 PSI STRUCTURAL CONCRETE WITH THORO COAT. (EXPOSED SURFACES +6")
2. CONTROL JOINTS SHALL BE INSTALLED AT 15'-0" O.C. 3/4" CHAMFER CONTROL JOINTS SHALL BE INSTALLED ON BOTH FACES OF THE WALL.
3. WALL & 16" SILL TO BE PAID AS STRUCTURAL CONCRETE

AS BUILT INFORMATION
CONTRACTOR MORRIS & CHANEY CONTRACTORS
WORK STARTED 3/19/03 DATE 7/03
WORK COMPLETED 8/4/03 DATE 7/03
VERIFICATION SURVEYS PLC DATE 7/03
CONSTRUCTION DRAWINGS STAMPED BY DATE
MICRO-FILM INFORMATION
RECORDED BY
NO
DATE

BENCH MARKS
"I-820", THE STATION IS LOCATED 9 MILES N.E. OF DOWNTOWN ALBUQUERQUE TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE., THE STA. IS LOCATED IN THE N.E. QUADRANT
STATION MARK IS A STANDARD AGS BRASS TABLET, STAMPED "I-820", X = 410,237.38, Y = 1,534,092.46, G-O = .99984740
DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510' (SLD 1929)

SURVEY INFORMATION
FIELD NOTES BY DATE
NO.

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
9340
MARK GOODWIN
7/31/03

NO.	DATE	REMARKS	DESIGNED BY	DATE
		REVISIONS	GJC	10/01
		DESIGN	MJR	10/01
		DRAWN BY	DMG	10/01
		CHECKED BY		

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

LA CUEVA ARROYO

TITLE
GENERAL DETAILS

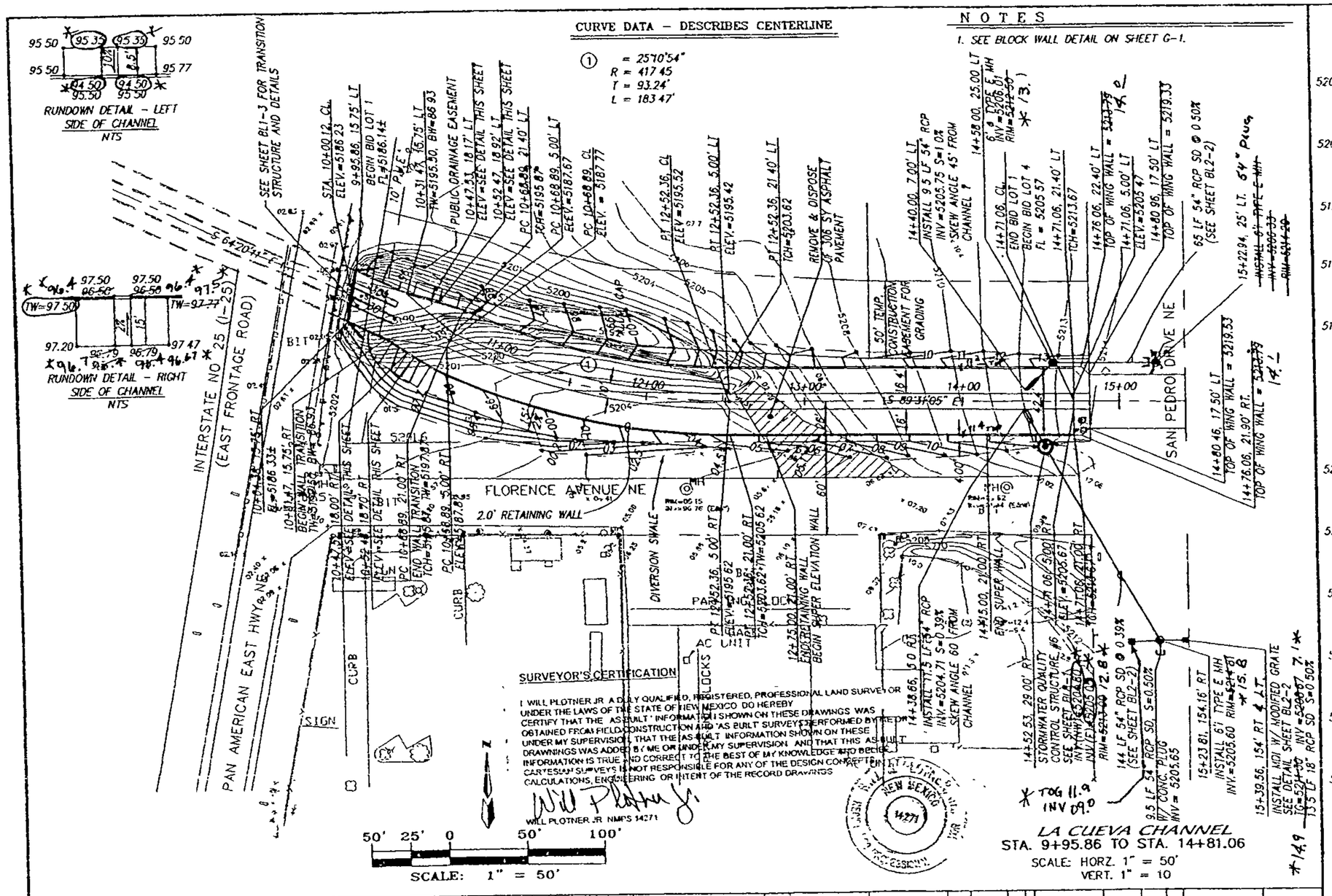
DESIGN REVIEW COMMITTEE — SEP 12 2002 — DATE
BY ENGINEER/AMAFCA — SEP 12 2002 — CITY ENGINEER — DATE
NO./DATE/BY | NO./DATE/BY

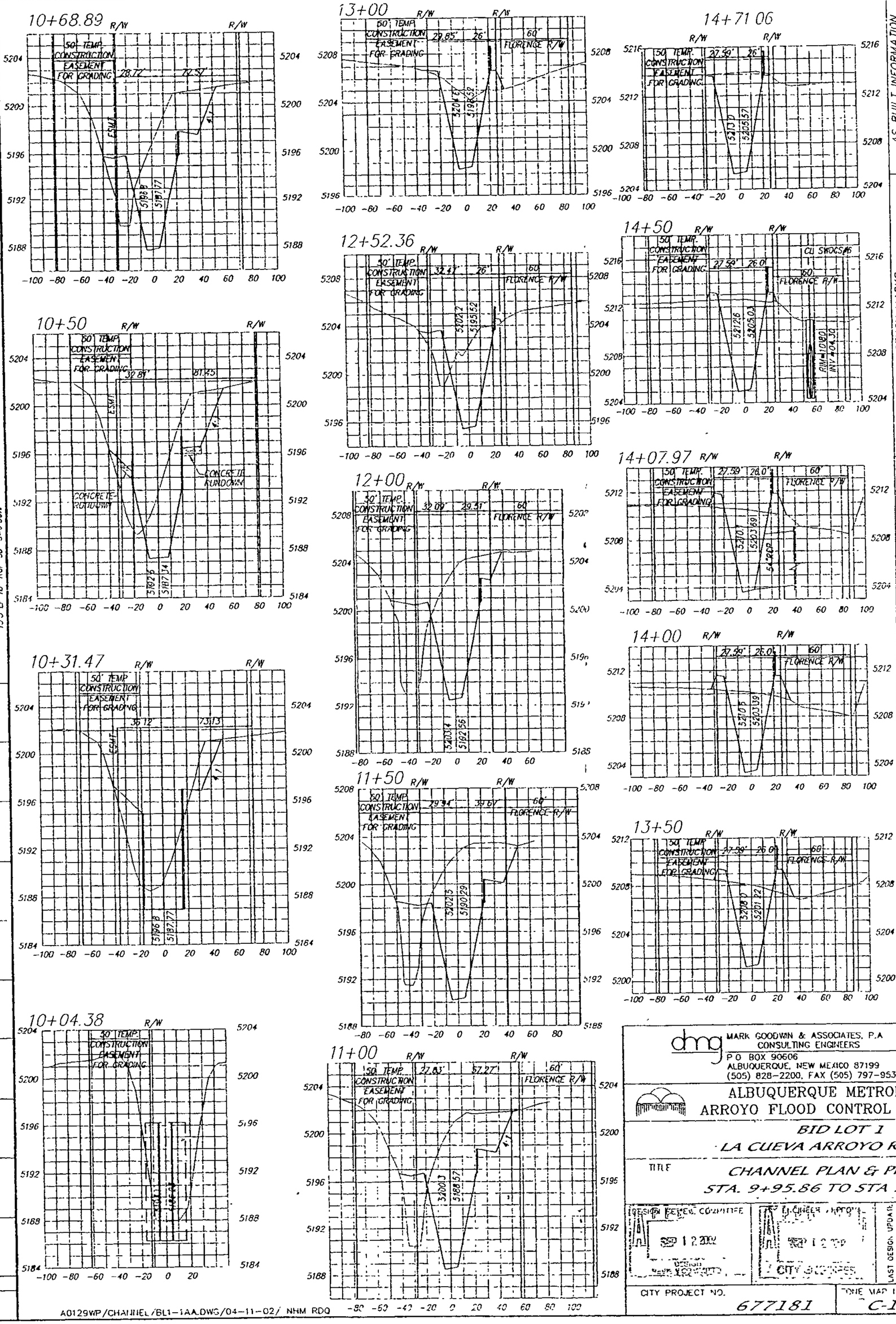
CITY PROJECT NO 677181
ZONE MAP NO C-19-Z
SHEET G-2

A00129WP\CHANNEL\DETAIL_2\04-11-02\ MJR NHM PDQ

k:\a00\05\a01298wp\c · EL\DETAIL_2.dwg Fri Apr 12 08:31:15 2002 by der

RECORD DRAWINGS





MARK GOODWIN & ASSOCIATES, P.A
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

BID LOT 1

LA CUEVA ARROYO REACH 1

TITLE: CHANNEL PLAN & PROFILE STA. 9+95.86 TO STA 14+71.06

SURVEY INFORMATION			
NO	DATE	FIELD NOTES BY	
		CONTRACTOR MARK + GOODWIN CONTRACTORS	DATE 7/61
		ENGINEER MARK GOODWIN & ASSOC.	DATE 7/61
		SURVEYED BY CARTESIAN SURVEYS INC.	DATE 7/63
		LEVELS RUN BY SURVEY INC.	DATE 7/63
		SCRIBED BY:	DATE
		RECORDED BY	
		NO	

AS BUILT INFORMATION

BENCH MARKS

"I-820", THE STATION IS LOCATED 2 MILES W. E. OF DOWNTOWN ALBUQUERQUE, TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST.; THEN NORTH ON BARSTOW ST., 1.0 MILE TO MODESTO AVE.; THE STA. IS LOCATED IN THE N.E. QUADRANT

STATION MARK IS A STANDARD AGS BRASS TABLET, STAMPED "I-820", X = 410,237.56, Y = 1,534,082.48, G-G = 5986.4740

DELTA ALPHA = 0°10'21", CENTRAL ZONE, (NAD 1927)

ELEVATION = 5474.510' (SLD 1929)

ENGINEER'S SEAL

NO	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY GJK DATE 9/01

DRAWN BY RDQ DATE 9/01

CHECKED BY DMG DATE 9/01

DESIGN REVIEW COMMITTEE

CITY ENGINEER APPROVAL

DATE

LAST DESIGN UPDATE

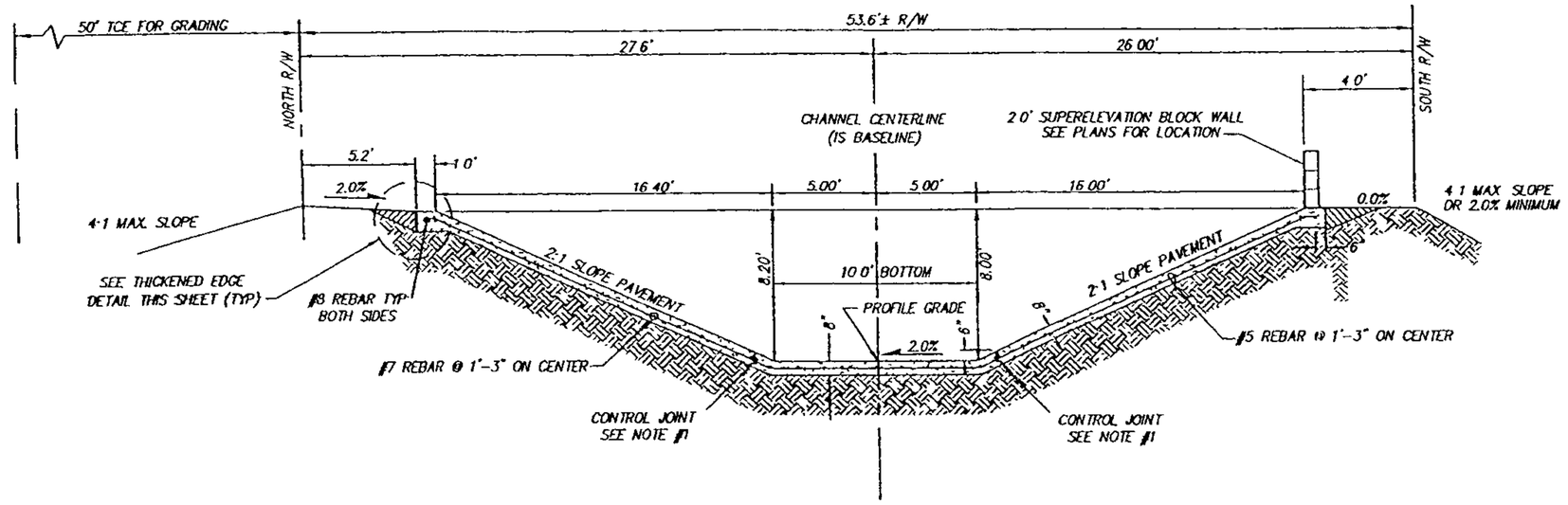
CITY PROJECT NO. 677181

ZONE MAP NO C-19-Z

SHEET BL1-1

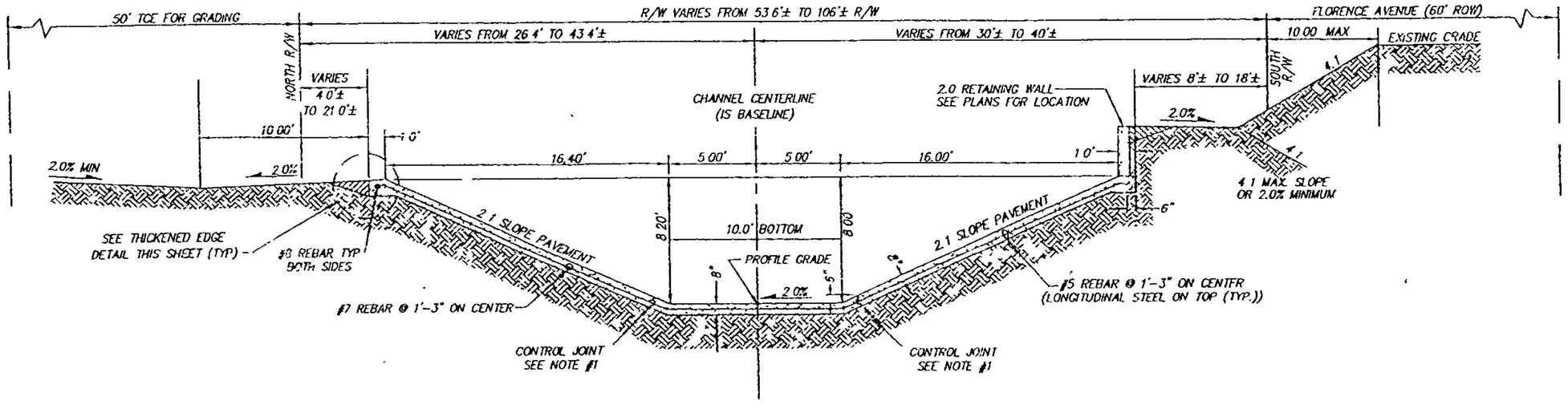
A0129WP/CHANNEL/BL1-1AA.DWG/04-11-02/ NHM RDQ

F:\AD\p1a1\A0129WP\GH BL1BL1-1AA.dwg Thu Apr 11 13:50:42 2002 by dgr



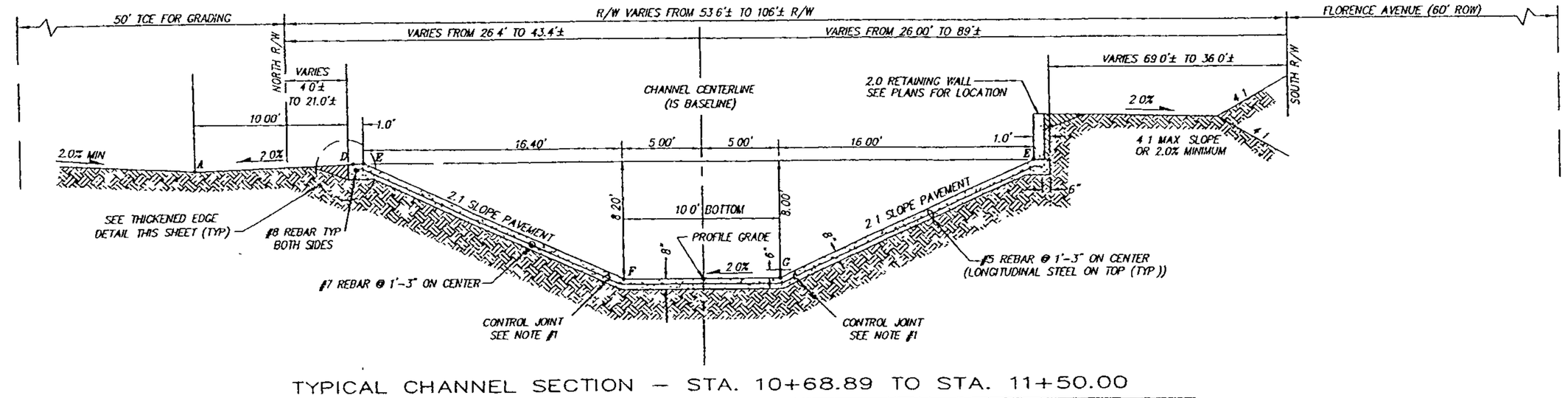
TYPICAL CHANNEL SECTION — STA. 12+75.00 TO STA. 14+71.06

N.T.S



TYPICAL CHANNEL SECTION — STA. 11+50 TO STA. 12+75.00

N.T.S

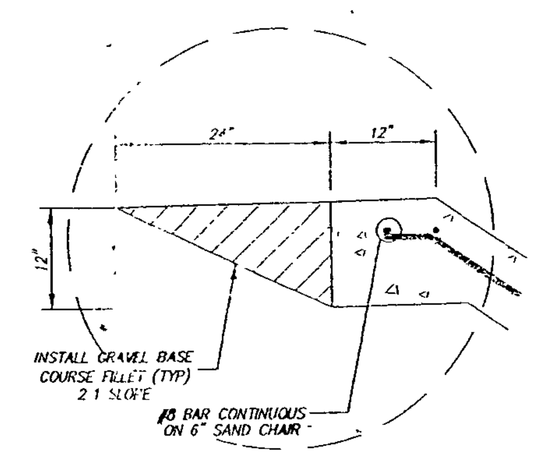


TYPICAL CHANNEL SECTION — STA. 10+68.89 TO STA. 11+50.00

N.T.S.

NOTES

1. SAW CUT CONTROL JOINT 1/4" WIDE, 2" DEEP AND APPLY POLYURETHANE SEALANT OR USE COLD KEY JOINT OR ENGINEER APPROVED 'EQUAL' (CONTRACTOR'S OPTION) TYPICAL BOTH SIDES.
2. CONCRETE SLOPE PAVING SHALL BE FINISHED WITH A DOUBLE TINE FINISH, I.E., BRIDGE TINE FINISH WITH TWO PASSES TRANSVERSE TO FLOW
3. CONCRETE SLOPE PAVING SHALL INCLUDE 8" SLOPE PAVING 12" SILL, ALL REINFORCEMENT AND CHAIRS AS NEEDED



CONCRETE CHANNEL SILL DETAIL

NOTE:

N.T.S

1. ALL CHANNEL SURFACES SHALL HAVE BRIDGE FLOAT FINISH, DOUBLE TINED
2. ALL CHANNEL CONCRETE SHALL BE TINTED SAN DIEGO BUFF 1 LB PER SACK OF CEMENT.
3. GRAVEL BASE COURSE FILLET IS INCIDENTAL TO COST OF CHANNEL LINING

AS BUILT INFORMATION

CONTRACTOR: MARES & CHART CONTRACTING
WORK STAKED BY: CARY SAP DATE: 7/03
AS-BUILTED BY: BHJ DATE: 7/03
VERIFICATION BY SURVEY: JOHN SAP DATE: 7/03
CHECKED BY: CARMEN ESPARZA DATE: 7/03
DRAWN BY: STEVEN DIAZ
RECORDED BY: MICRO-FILM INFORMATION
FILED: DATE:

BENCH MARKS

"I-820", THE STATION IS LOCATED 3 MILES N.E. OF DOWNTOWN ALBUQUERQUE, TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT 1 MILE TO BARSTOW ST.; THEN NORTH ON BARSTOW ST. 1.0
STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "I-820" X = 410,237.56, Y = 1,534,092.46, C-C = 69984740
DELTA ALPHA = 010°23', CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510' (SLD 1929)

SURVEY INFORMATION

FIELD NOTES BY:

NO	DATE	REMARKS

ENGINEER'S SEAL

REVISIONS

NO.	DATE	REMARKS	BY
		DESIGN	
	09/01		GJK
	09/01		MJR
	09/01		DMG

DESIGNED BY GJK DATE 09/01
DRAWN BY MJR DATE 09/01
CHECKED BY DMG DATE 09/01

dmg MARK GOODWIN & ASSOCIATES P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN
ARROYO FLOOD CONTROL AUTHORITY

BID LOT 1
LA CUEVA ARROYO REACH 1

TITLE
CROSS-SECTION TEMPLATE AND ELEVATIONS

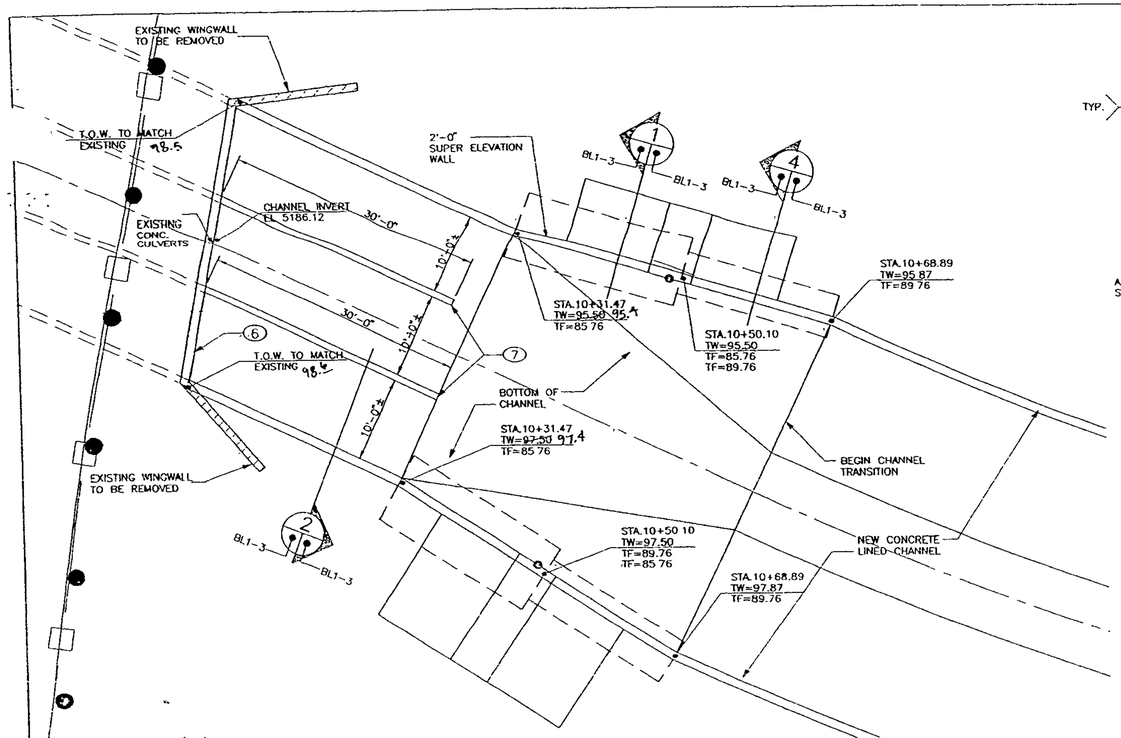
PE APPROVED: APR 12 2002
CITY ENGINEER APPROVAL: APR 12 2002
LAST DESIGN UPDATE
NO. DATE | NO. DATE/BY

CITY PROJECT NO 677181
ZONE MAP NO C-19-Z
SHEET BL1-2

A00129WP\CHANNEL\X-SEC-TEMPLATES\04-11-02\MJR RDQ 13H8

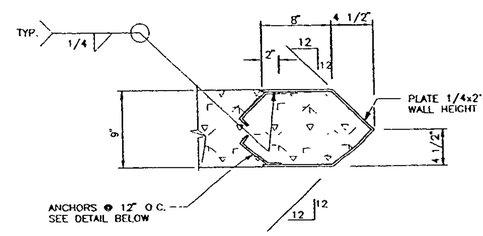
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RECORD DRAWINGS



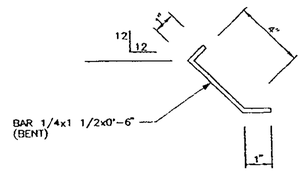
PARTIAL CHANNEL TRANSITION PLAN

SCALE 1/8" = 1'-0"



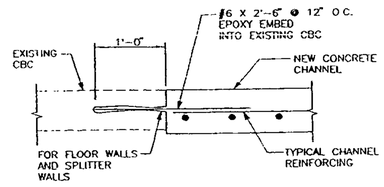
NOSE PLATE DETAIL @ INTERIOR WALL

NO SCALE



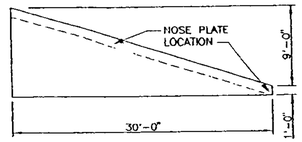
ANCHOR DETAIL

NO SCALE



CHANNEL CONNECTION AT EXISTING CBC

N.T.S.

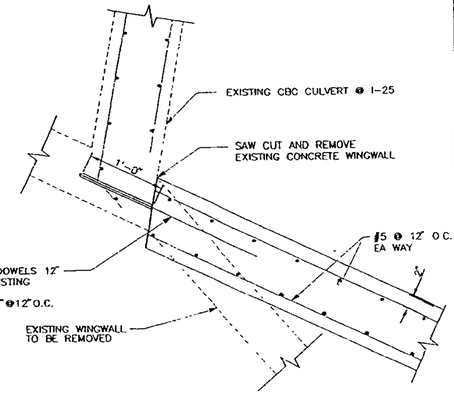


SPLITTER WALL ELEVATION

NO SCALE

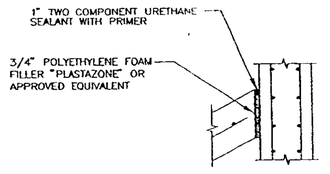
KEYED NOTES:

1. 3/4" EXPANSION JOINT PER DETAIL "A" BL1-3
2. BACKFILL COMPACTED TO 90% ASTM D-1557
3. SUBGRADE FOR CHANNEL
4. 36" STRUCTURAL FILL COMPACTED TO 95% ASTM D-1557 OVER 12" SUBGRADE COMPACTED TO 90% ASTM D-1557.
5. 3/4" CHAMFER, TYPICAL.
6. DOWEL THE BOTTOM OF THE NEW CONCRETE CHANNEL INTO THE EXISTING CBC AS PER DETAIL "3" ON THIS SHEET
7. NOSE PLATE AT END OF WALL AS PER DETAIL THIS SHEET



DETAIL HEADWALL CONNECTION AT I-25

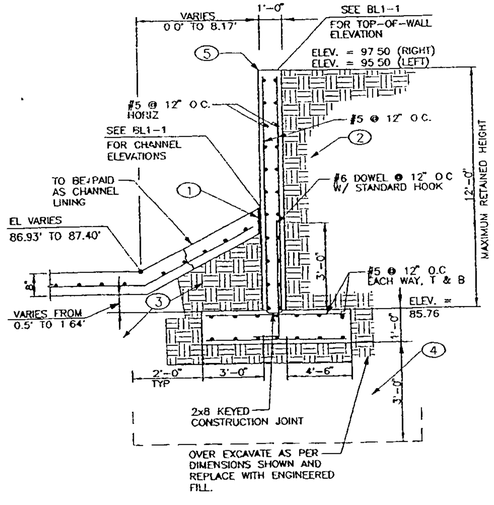
1" = 1'-0"



3/4" TYPICAL EXPANSION JOINT AT RETAINING WALLS

1" = 1'-0"

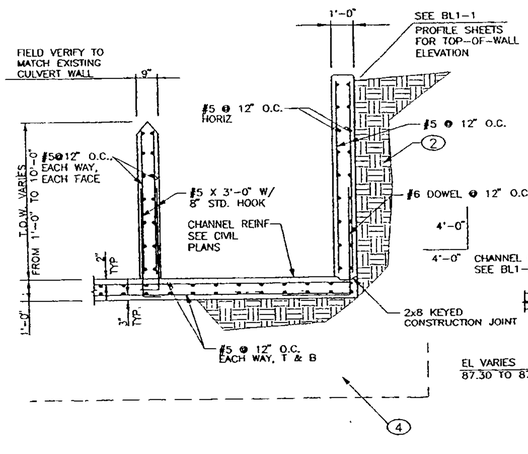
A BL1-3 BL1-3



TYPICAL SECTION AT RETAINING WALLS FOR TRANSITIONS UNLESS OTHERWISE NOTED

NTS

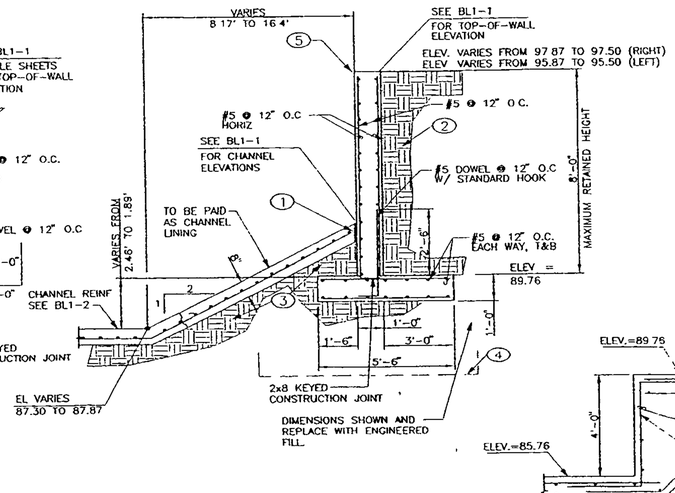
1 BL1-3 BL1-3



TYPICAL SECTION AT RETAINING WALLS FOR TRANSITIONS

1/2" = 1'-0"

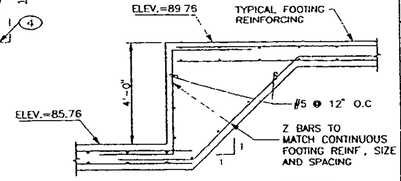
2 BL1-3 BL1-3



TYPICAL SECTION AT RETAINING WALLS FOR TRANSITIONS

3/8" = 1'-0"

4 BL1-3 BL1-3



STEPPED FOOTING DETAIL

NO SCALE

AS BUILT INFORMATION
CONTRACTOR MARK + COMPANY INITIALS DATE 3/01
WORK STAKED BY SURVEYOR INITIALS DATE 7/02
INSPECTOR'S FIELD CHANGES BY CARPENTER DATE 7/02
VERIFICATION BY SURVEYOR INITIALS DATE 7/02
CORRECTED BY SURVEYOR INITIALS
MICRO-FILM INFORMATION
DATE
RECORDED BY
NO.

BENCH MARKS
"1-B20", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR. GO EAST ON LOS ANGELES DR 1.0 MILE TO BARSTOW ST.; THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA IS LOCATED IN THE N.E QUADRANT
STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "1-B20" X = 410,237.56, Y = 1,524,082.45, G-G = .99984740
DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510' (SLD 1929)

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER 9441 NEW MEXICO

NO.	DATE	REMARKS / REVISIONS	BY
		DESIGN	
	3/18/02	DESIGNED BY	JPG
	3/18/02	DRAWN BY	TEP
	3/18/02	CHECKED BY	RU

101533
CMI, Inc.
Mechanical / Electrical / Structural Consulting Engineers
6400 Uptown Boulevard, N.E. Suite 505E (505) 884-8868
Albuquerque, New Mexico 87110 FAX 884-7048

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

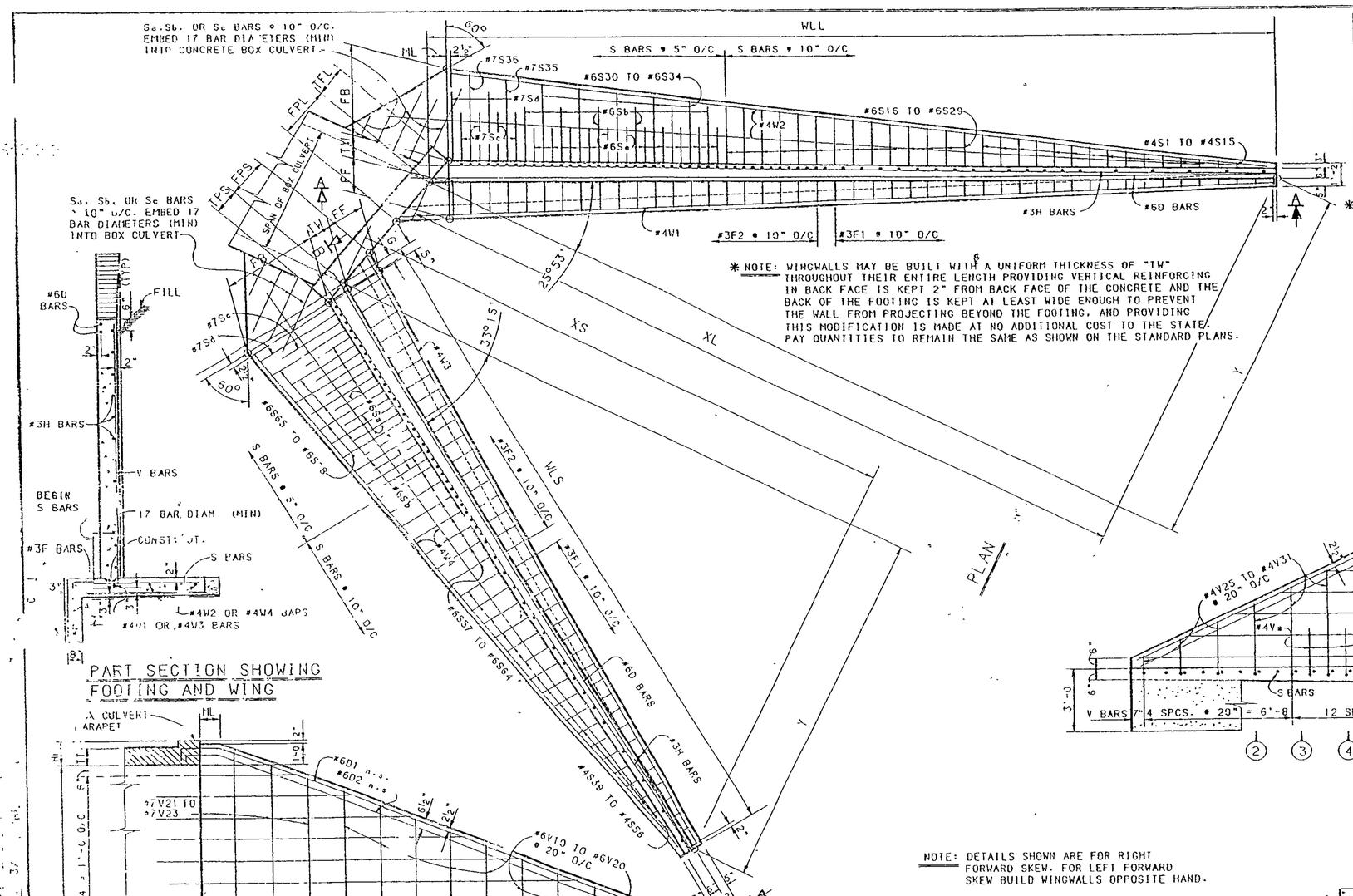
BID LOT 1
CHANNEL TRANSITION STRUCTURE

TITLE: LA CUEVA CHANNEL
PARTIAL CHANNEL PLAN AND DETAILS,

DESIGN REVIEW COMMITTEE — SEP 12 2002 — REVIEW COMMENTS
CITY ENGINEER APPROVAL — SEP 12 2002 — CITY ENGINEER
LAST DESIGN UPDATE — MO/DAY/YR

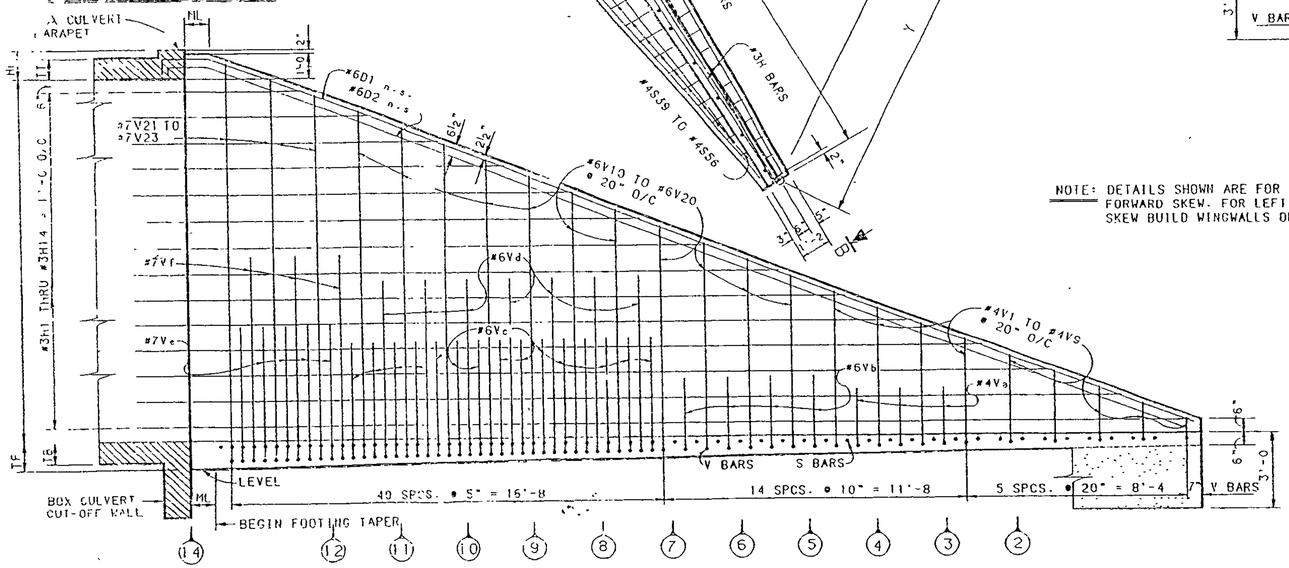
CITY PROJECT NO 677181
ZONE MAP NO C-19-Z
SHEET OF BL1- 3

WINGWALL DIMENSIONS												
H	2	3	4	5	6	7	8	9	10	11	12	14
WLL	7'-0 1/2	9'-8 1/4	12'-4	14'-11 3/4	17'-7 1/2	20'-3 1/4	22'-11	25'-6 3/4	28'-2 1/2	30'-10 1/4	33'-6	38'-9 1/2
XL	6'-4	8'-8 5/8	11'-1 1/8	13'-5 3/4	15'-10 1/4	18'-2 7/8	20'-7 3/8	23'-0	25'-4 1/2	27'-9 1/8	30'-1 5/8	34'-10 3/4
ML	0'-5 7/16	0'-5 7/16	0'-5 7/16	0'-5 7/16	0'-5 7/16	0'-5 7/16	0'-5 5/8	0'-6 1/2	0'-7 3/8	0'-7 13/16	0'-8 5/8	0'-9 1/2
TPL	0'-7 15/16	0'-7 15/16	0'-7 15/16	0'-7 15/16	0'-7 15/16	0'-7 15/16	0'-8 5/8	0'-9 15/16	0'-11 1/4	0'-11 7/8	1'-1 1/4	1'-2 5/16
FPL	0'-11 1/4	1'-0 5/16	1'-1 7/8	1'-3 1/4	1'-4 9/16	1'-6 11/16	1'-8 1/16	1'-9 1/2	1'-10 7/8	2'-1	2'-2 3/8	2'-5 1/8
WLS	5'-7 3/8	7'-8 1/8	9'-9 7/8	11'-11 7/8	14'-0 1/2	16'-1 3/4	18'-2 7/8	20'-4 1/8	22'-5 1/2	24'-6 3/4	26'-8 1/8	30'-10 7/8
XS	4'-8 1/4	6'-5 3/8	8'-2 5/8	9'-11 3/4	11'-8 7/8	13'-6 1/8	15'-3	17'-0 1/4	18'-9 3/8	20'-6 1/2	22'-3 3/4	25'1-10
C	0'-2	0'-2	0'-2	0'-2	0'-2	0'-2 1/8	0'-2 1/2	0'-2 13/16	0'-2 15/16	0'-3 5/16	0'-3 5/8	0'-4 1/4
TPS	0'-6 5/16	0'-6 5/16	0'-6 5/16	0'-6 5/16	0'-6 5/16	0'-6 7/8	0'-7 7/8	0'-8 15/16	0'-9 1/2	0'-10 1/2	0'-11 5/16	1'-1 11/16
FPS	0'-8 7/16	0'-9 11/16	0'-10 3/4	0'-11 7/8	1'-0 15/16	1'-2 1/2	1'-3 5/8	1'-4 11/16	1'-5 3/4	1'-7 7/16	1'-8 1/2	1'-10 7/8
Y	3'-0 7/8	4'-2 3/4	5'-4 5/8	6'-6 1/2	7'-8 3/8	8'-10 1/4	10'-0	11'-1 7/8	12'-3 3/4	13'-5 5/8	14'-7 1/2	16'-11 1/4
FB	1'-0 1/2	1'-4 1/2	1'-8 1/2	2'-0 1/2	2'-4 1/2	2'-7 1/2	2'-10 1/2	3'-1 1/2	3'-5	3'-7 1/2	3'-10 1/2	4'-1 1/2
TW	0'-6	0'-6	0'-6	0'-6	0'-6	0'-6 1/2	0'-7 1/2	0'-8 1/2	0'-9	0'-10	0'-11	1'-1
FF	0'-8	0'-9	0'-10	0'-11	1'-0	1'-1 1/2	1'-2 1/2	1'-3 1/2	1'-4 1/2	1'-6	1'-7	1'-9
TF	0'-7	0'-7 1/2	0'-8	0'-8 1/2	0'-9	0'-9 1/2	0'-10	0'-10 1/2	0'-11	0'-11 1/2	1'-0	1'-1



* NOTE: WINGWALLS MAY BE BUILT WITH A UNIFORM THICKNESS OF "TW" THROUGHOUT THEIR ENTIRE LENGTH PROVIDING VERTICAL REINFORCING IN BACK FACE IS KEPT 2" FROM BACK FACE OF THE CONCRETE AND THE BACK OF THE FOOTING IS KEPT AT LEAST WIDE ENOUGH TO PREVENT THE WALL FROM PROJECTING BEYOND THE FOOTING, AND PROVIDING THIS MODIFICATION IS MADE AT NO ADDITIONAL COST TO THE STATE. PAY QUANTITIES TO REMAIN THE SAME AS SHOWN ON THE STANDARD PLANS.

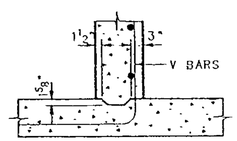
PART SECTION SHOWING FOOTING AND WING



SECTION A - A

SECTION B - B

NOTE: DETAILS SHOWN ARE FOR RIGHT FORWARD SKEW. FOR LEFT FORWARD SKEW BUILD WINGWALLS OPPOSITE HAND.



CONSTRUCTION JOINT DETAIL

NOTE: ENCIRCLED NUMBERS SHOW STOPPING POINTS OF REINFORCEMENT FOR CLEAR HEIGHTS "H". VERTICAL AND HORIZONTAL WING REINFORCEMENT SHOWN ON SECTIONS AA AND BB IS ON FAR SIDE. F BARS AND W BARS ARE NOT SHOWN.

NO.	DESCRIPTION	DATE	BY
6			
5			
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

WINGWALLS FOR CONCRETE BOX CULVERTS

15° SKEW

DESIGNED BY: E.M. 7/85
DETAILED BY: A. K. 3/

APPROVED: [signature] 7/85
RECOMMENDED: DESIGN ENGINEER DATE
APPROVED: [signature] 4-8-85
DESIGN ENGINEER DATE

SERIAL WSP-15 SHT. 1 OF 2

CITY PROJECT NO 677181

N M P SHEET. BL1-4

REFERENCE ONLY

...SAE/DRIDGE/STANDARDS$$
'83-8

RECORD DRAWINGS

F.H.W.A. REGION NO. 6 | SHEET NO.
NEW MEXICO PROJECT NO.

REINFORCING STEEL REQUIREMENTS

H	WING WALL	V1 to Vx Req'd. 1 of each	Va No.	Vb No.	Vc No.	Vd No.	Ve No.	Vf No.	H1 to Hx Req'd. 1 of each	D1 No.	D1 Length	D2 No.	D2 Length	D3 No.	D3 Length	D4 No.	D4 Length	S1 to Sx Req'd. 1 of each	Sa No.	Sb No.	Sc No.	Sd No.	W1 No.	W1 Length	W2 No.	W2 Length	W3 No.	W3 Length	W4 No.	W4 Length	F1 No.	F2 No.
2	L	1 to 4	--	--	--	--	--	--	1 to 2	1	9'-9	--	-----	--	-----	--	-----	1 to 6	--	--	--	--	4	9'-9	2	6'-3	--	-----	--	-----	10	--
	S	25 to 27	--	--	--	--	--	--	16 to 17	--	-----	--	-----	1	7'-6	--	-----	39 to 43	--	--	--	--	--	-----	--	-----	4	7'-9	2	4'-6	7	--
3	L	1 to 6	--	--	--	--	--	--	1 to 3	1	12'-6	--	-----	--	-----	--	-----	1 to 10	--	--	--	--	4	12'-6	2	9'-0	--	-----	--	-----	13	--
	S	25 to 29	--	--	--	--	--	--	16 to 18	--	-----	--	-----	1	10'-0	--	-----	39 to 46	--	--	--	--	--	-----	--	-----	4	10'-0	2	7'-0	10	--
4	L	1 to 7	2	--	--	--	--	--	1 to 4	1	15'-3	--	-----	--	-----	--	-----	1 to 13	--	--	--	--	4	15'-3	2	11'-9	--	-----	--	-----	16	--
	S	25 to 30	1	--	--	--	--	--	16 to 19	--	-----	--	-----	1	12'-6	--	-----	39 to 48	--	--	--	--	--	-----	--	-----	4	12'-3	2	9'-6	12	--
5	L	1 to 9	3	--	--	--	--	--	1 to 5	1	18'-0	--	-----	--	-----	--	-----	1 to 16	1/0	--	--	--	4	18'-0	2	14'-3	--	-----	--	-----	19	--
	S	25 to 31	3	--	--	--	--	--	16, to 20	--	-----	--	-----	1	14'-9	--	-----	39 to 51	1/0	--	--	--	--	-----	--	-----	4	14'-6	2	11'-6	15	--
6	L	1 to 10	3	2	--	--	--	--	1 to 6	1	21'-0	--	-----	--	-----	--	-----	1 to 19	2/0	--	--	--	4	20'-6	2	16'-9	--	-----	--	-----	22	--
	S	25 to 32	3	1	--	--	--	--	16 to 21	--	-----	--	-----	1	17'-0	--	-----	39 to 53	2/0	--	--	--	--	-----	--	-----	4	16'-6	2	13'-9	17	--
7	L	1 to 12	3	4	--	--	--	--	1 to 7	1	23'-9	1	18'-6	--	-----	--	-----	1 to 22	2/0	--	--	--	4	23'-6	2	19'-6	--	-----	--	-----	25	--
	S	25 to 34	3	2	--	--	--	--	16 to 22	--	-----	--	-----	1	19'-6	1	15'-3	39 to 56	2/0	--	--	--	--	-----	--	-----	4	18'-9	2	15'-9	20	--
8	L	1 to 14	3	4	2	1	--	--	1 to 8	1	26'-6	1	20'-6	--	-----	--	-----	1 to 25	3/0	--	--	--	4	26'-3	2	22'-0	--	-----	--	-----	25	4
	S	25 to 35	3	3	1	--	--	--	16 to 23	--	-----	--	-----	1	21'-9	1	17'-0	39 to 58	3/0	--	--	--	--	-----	--	-----	4	20'-9	2	17'-9	20	3
9	L	1 to 15	3	4	5	3	--	--	1 to 9	1	29'-3	1	22'-9	--	-----	--	-----	1 to 28	3/0	--	--	--	4	28'-9	2	24'-6	--	-----	--	-----	25	7
	S	25 to 36	3	3	3	2	--	--	16 to 24	--	-----	--	-----	1	24'-0	1	18'-6	39 to 61	3/0	--	--	--	--	-----	--	-----	4	23'-0	2	19'-9	20	5
10	L	1 to 17	3	4	8	4	--	--	1 to 10	1	32'-0	1	24'-9	--	-----	--	-----	1 to 30	0/3	4/2	--	--	4	31'-6	2	27'-9	--	-----	--	-----	25	10
	S	25 to 37	3	3	6	3	--	--	16 to 25	--	-----	--	-----	1	26'-6	1	20'-6	39 to 63	0/1	3/0	--	--	--	-----	--	-----	4	25'-0	2	22'-0	20	8
11	L	1 to 18	3	4	11	6	--	--	1 to 11	1	34'-9	1	26'-9	--	-----	--	-----	1 to 32	0/6	4/3	--	--	4	34'-3	2	29'-9	--	-----	--	-----	25	13
	S	25 to 39	3	3	8	4	--	--	16 to 26	--	-----	--	-----	1	28'-9	1	22'-3	39 to 65	0/3	4/1	--	--	--	-----	--	-----	4	27'-3	2	24'-0	20	10
12	L	1 to 20	3	4	15	7	--	--	1 to 12	1	37'-6	1	29'-0	--	-----	--	-----	1 to 33	0/10	5/5	--	--	4	37'-0	2	32'-3	--	-----	--	-----	25	16
	S	25 to 40	3	3	11	5	--	--	16 to 27	--	-----	--	-----	1	31'-0	1	24'-0	39 to 66	0/6	4/2	--	--	--	-----	--	-----	4	29'-3	2	26'-0	20	13
14	L	1 to 23	3	4	15	7	5	3	1 to 14	1	43'-0	1	33'-0	--	-----	--	-----	1 to 36	0/11	0/6	5/4	2	4	42'-6	2	37'-6	--	-----	--	-----	25	21
	S	25 to 42	3	3	13	7	3	1	16 to 29	--	-----	--	-----	1	35'-6	1	27'-3	39 to 68	0/9	0/4	4/2	1	--	-----	--	-----	4	33'-6	2	30'-3	20	18

QUANTITIES

Concrete Cu. Yds.	Reinf. Steel Lbs.	H
1.61	139	2
2.56	202	3
3.62	266	4
4.82	353	5
6.22	466	6
7.92	658	7
10.09	850	8
12.63	1065	9
15.31	1335	10
18.67	1612	11
22.49	1906	12
31.71	2620	14

NOTE: REINFORCING STEEL REQUIREMENTS AND QUANTITIES IN THE ABOVE TABLE ARE TABULATED FOR TWO WINGS AT ONE END OF THE CULVERT.

THE NUMBER OF Sa, Sb, & Sc BARS SHOWN IN THE UPPER PORTION OF TABULATION ARE TO BE PLACED IN FOOTING ADJACENT TO BARREL. NUMBER SHOWN IN THE LOWER PORTION OF THE TABULATION ARE TO BE PLACED IN FOOTING ADJACENT TO WING.

DESIGN DATA

DESIGN ACCORDING TO AASHTO SPECIFICATIONS, 1973
ACTIVE EARTH PRESSURE DETERMINED FROM RANKINE'S FORMULA

WEIGHT OF EARTH: 120 LBS./FT. } FOR RANKINE'S FORMULA
FILL SLOPE 2:1 }
ANGLE OF INTERNAL FRICTION: 34°

DESIGN STRESSES: f'c = 3,000 psi, fc = 1,200 psi,
fs = 20,000 psi, n = 10
MAXIMUM COMPUTED FOOTING PRESSURE = 2 TONS PER SQ. FT.

BAR BENDING DIAGRAMS

R=2" for #4 bars
R=3" for #6 bars
R=3½" for #7 bars

#4V1	7"	1'-4 lg.
to	by 8"	by 8"
#4V9	5'-11	6'-8 lg.
#6V1c	6'-6	7'-8 lg.
to	by 8"	by 8"
#6V29	13'-2	14'-4 lg.
#7V21	13'-9	15'-1 lg.
to	by 8"	by 8"
#7V24	15'-9	17'-1 lg.
#4V25	8"	1'-5 lg.
to	by 10"	by 10"
#4V31	5'-8	6'-5 lg.
#32	6'-4	7'-6 lg.
to	by 10"	by 10"
#6V44	16'-4	17'-6 lg.
#4V3	2'-2	3'-2 lg.
#6V1	2'-3	4'-0 lg.
#6V2	4'-5	6'-0 lg.
#6Vd	6'-10	8'-6 lg.
#7Ve	5'-2	7'-8 lg.
#7V°	7'-11	10'-4 lg.

Piece this end in cut off wall

#3H1	5'-3	
to	by 2'-7½	
#3H15	42'-9	
#3H16	4'-6	
to	by 2'-11½	
#3H30	34'-3	

R=15/16"

#3F1	2'-7	3'-6 lg.
#3F2	2'-7	4'-6 lg.

#4W2	Length
#4W4	Length

R=1¾" 10⅜" 12

#4W1 Length minus 1'-6

R=1¾" 12

#4W3 Length minus 1'-6

#4S1	1'-1
to	by 1"
#4S15	2'-3
#6S16	2'-9
to	by 1"
#6S29	3'-10
#6S30	4'-2
to	by 2"
#6S34	4'-10
#7S35	5'-2
to	by 2"
#7S38	5'-8
#4S39	1'-1
to	by 1⅜"
#4S56	3'-0
#6S57	3'-6
to	by 1⅜"
#6S64	4'-4
#6S65	4'-5
to	by 2¾"
#6S70	5'-7
#6Sa	3'-5
#6Sb	4'-5
#7Sc	4'-2
#7Sd	5'-2

R=2⅝ 4⅝ 12

#6D1 Length minus 3'-0
#6D2 Length minus 2'-3

R=2⅝ 5¾ 12

#6D3 Length minus 2'-6
#6D4 Length minus 2'-9

1'-2
9½"

NOTE: SEE TABLE FOR LENGTHS OF BARS NOT SHOWN AND NUMBER REQUIRED.

GENERAL NOTES

1. WORKMANSHIP AND MATERIALS SHALL CONFORM TO NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT SPECIFICATIONS.
2. ALL CONCRETE SHALL BE CLASS "A". CHAMFER ALL EXPOSED EDGES ¾".
3. ALL REINFORCING STEEL SHALL CONFORM TO A.A.S.H.T.O. SPECIFICATION M 31, GRADE 60. ALL DIMENSIONS REFER TO ℄ OF BAR. BARS TO BE CUT TO THE NEAREST ONE INCH LENGTH, USE SHORTER LENGTH WHEN DETAILED LENGTH FALLS ON ½" EXACT
4. REINFORCING STEEL MAY BE SPLICED WHERE NECESSARY TO AVOID EXCESSIVE LENGTHS OF BARS. SPLICES SHALL LAP A MINIMUM OF 20 BAR DIAMETERS. PAY WEIGHT OF REINFORCING STEEL DOES NOT INCLUDE WEIGHT OF SPLICES; COST OF SPLICE MATERIAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR REINFORCING STEEL.
5. WINGWALLS ARE TO BE PLACED MONOLITHIC WITH BARREL.

NO.	DESCRIPTION	DATE	BY
6			
5			
4			
3			
2			
1	REVISED NOTE 13	6-14-94	PH

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

WINGWALLS FOR CONCRETE BOX CULVERTS 15° SKEW

LAYOUT BY | DRAWN BY J.A.C. | CHECKED BY E.J.K. | DESIGN BUREAU CHIEF | APPROVED | DESIGN BUREAU CHIEF | DATE 12-15-83

SERIAL WSP-15 SHT. 2 OF 2

CITY PROJECT NO 677181 N.M.P. SHEET BL1-5

REFERENCE ONLY

RECORD DRAWINGS

PROPOSED FINISHED CONTOURS

APPROXIMATE LIMITS OF STOCKPILE BERM CONSTRUCTED 4'± ABOVE EXISTING GROUND

APPROXIMATE STORAGE VOLUME AVAILABLE = 50,000 CY

CONSTRUCT "PONDING" DITCHES ALONG TOP OF BERM EVERY 150'± SEE DITCH DETAIL THIS SHEET

TAXI WAY NOT AVAILABLE FOR STOCKPILE ACTIVITY

LIMITS OF STOCKPILE ACTIVITY NO STOCKPILE CONSTRUCTION ACTIVITY OUTSIDE THESE LIMITS

EXECUTED TEMPORARY CONSTRUCTION EASEMENT

EXECUTED TEMPORARY CONSTRUCTION EASEMENT (GRADING ONLY)

ICE AVENUE NE

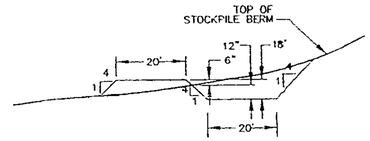
SAN PEDRO DRIVE NE

GLENDALE AVENUE NE

GLENDALE AVENUE NE

NOTES:

1. LOCATION SHOWN AVAILABLE TO CONTRACTOR FOR SOIL STOCKPILING
2. STOCKPILE ACCESS AVAILABLE ON ABANDONED RUNWAY / TAXI WAYS ONLY.
3. STOCKPILE SITE SHALL BE CLEARED. CLEARED MATERIAL SHALL BE STOCKPILED TEMPORARILY DURING CONSTRUCTION IN A LOCATION SPECIFIED BY THE ENGINEER. FOLLOWING COMPLETION OF STOCKPILING OPERATION, CLEARED MATERIALS SHALL BE SPREAD EVENLY ON STOCKPILE.
4. BERM SIDE SLOPES NOT TO EXCEED 3:1
5. BERM SHALL NOT EXCEED 5' IN HEIGHT FROM EXISTING GROUND.
6. CONTRACTOR SHALL INSTALL SILT FENCE AROUND PERIMETER OF BERM PRIOR TO COMMENCING STOCKPILING ACTIVITIES.
7. ENTIRE STOCKPILE SHALL BE RESEEDED PER PROJECT SPECIFICATIONS.
8. ONCE STOCKPILED, MATERIAL BECOMES PROPERTY OF LANDOWNER.
9. MAPPING SHOWN HEREON DOES NOT CORRELATE WITH PROJECT MAPPING OR (SLD) 1929.



PONDING DITCH DETAIL
NTS

N

GRAPHIC SCALE

(IN FEET)
1 inch = 100 ft.

MICRO-FILM INFORMATION
RECORDED BY
DATE

AS-BUILT INFORMATION
CONTRACTOR JARAMILLO & CHABART CONTRACTORS
WORK STARTED DATE 7/01
FIELD BY
VERIFICATION BY
DRAWINGS SUBMITTED BY BHE DATE 7/01
DRAWINGS CORRECTED BY DATE
DRAWINGS APPROVED BY DATE 7/03

BENCH MARKS
SEE NOTE 6

SURVEY INFORMATION
NO. BY DATE

TEMPORARY CONSTRUCTION PERMIT
(for access and the stockpiling of dirt)
EXHIBIT "A"

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD S.E.
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 896-8021

BID LOT 2
LA CUEVA CHANNEL

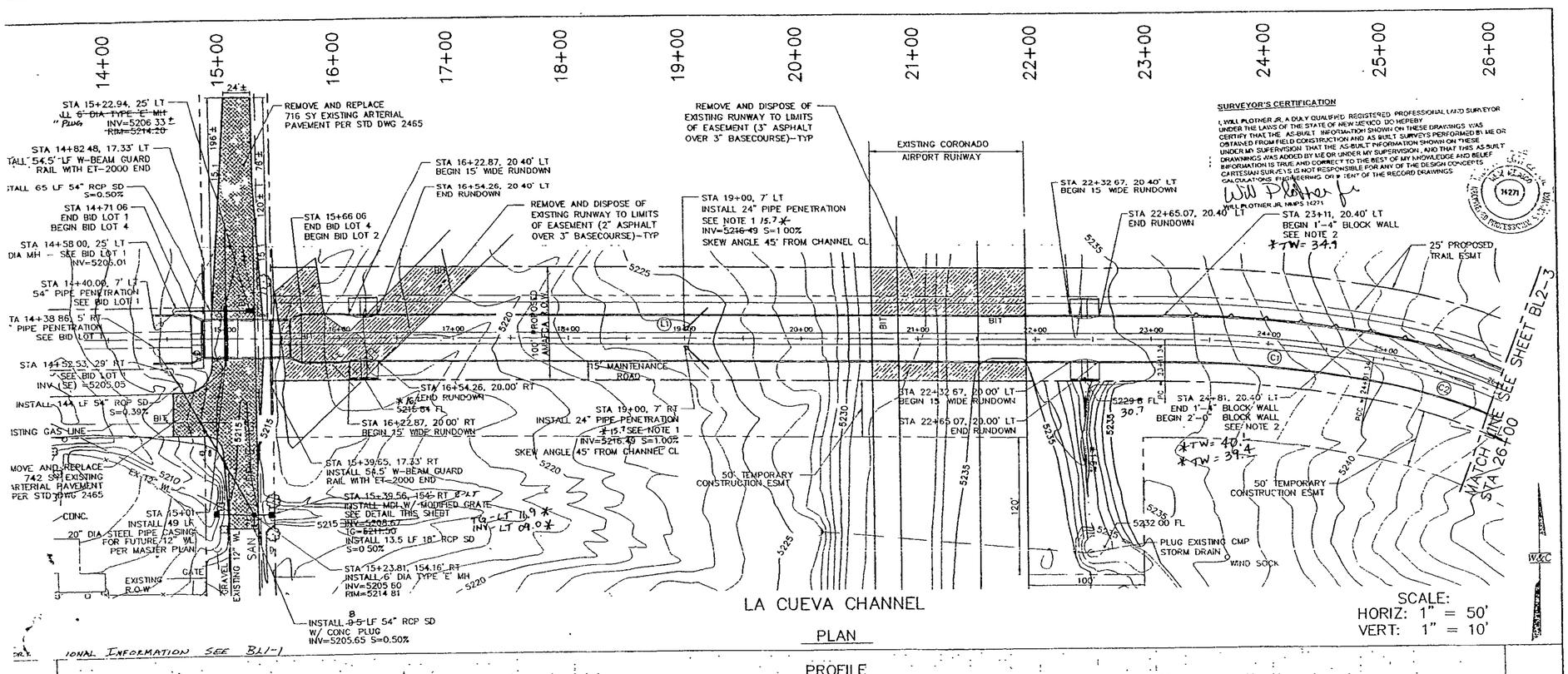
LA CUEVA CHANNEL
STOCKPILE LOCATION MAP

REVISIONS NO	DATE	REMARKS	BY

DESIGN	JDV	WCEA 110 X1218035	DATE MAR 2002
DRAWN	JLB	PROJECT NO 677181	SHEET NO BL2-1
CHECK	DSA		

218035-R\M\SHEETS\8135DTL4.DWG\03-19-02

RECORD DRAWINGS



SURVEYOR'S CERTIFICATION

I, WILL PLOTNER JR, A DULY QUALIFIED REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO DO HEREBY CERTIFY THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND AS BUILT SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION, AND THAT THIS AS-BUILT INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS CALCULATIONS ENGINEERING OR PERTENT OF THE RECORD DRAWINGS

Will Plotner

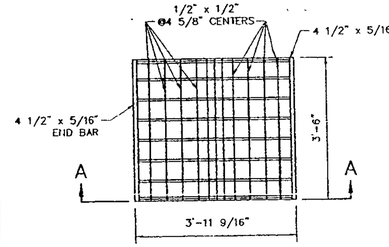
WILL PLOTNER JR. NMPS 14271

GENERAL NOTES

1. SEE PIPE PENETRATION DETAIL ON SHEET G2
2. SEE BLOCK WALL DETAIL ON SHEET G1
3. RUNDOWNS PER DETAILS SHEET G1

LINE TABLE		
LINE	LENGTH	BEARING
L1	830.28	S89°31'05"E

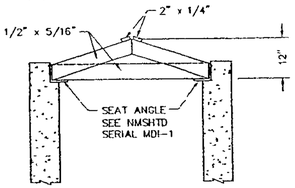
CURVE TABLE		
CURVE	LENGTH	RADIUS
C1	150.00	1000.00
C2	198.74	500.00



MEDIAN DROP INLET
MODIFIED GRATE DETAIL

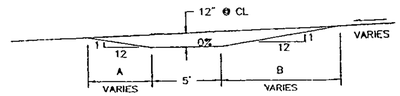
NTS

(NMSHTD SERIAL MDI-1)
MODIFICATION SHALL BE CONSIDERED
INCIDENTAL TO BID ITEM – MEDIAN
DROP INLET



SECTION A–A

NTS



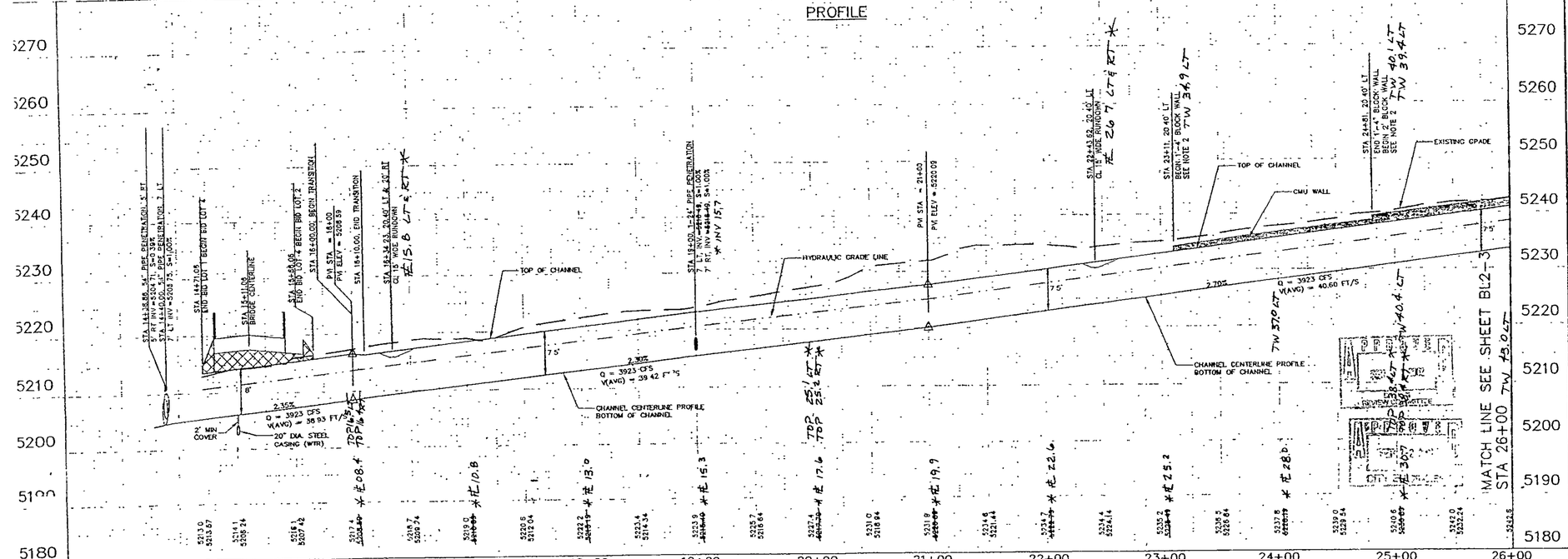
SEE CHART FOR DIMENSIONS

RUNDOWN LENGTH DIMENSIONS

NTS

DIMENSIONS		
CHANNEL SLOPE	A	B
3.7%	7.54'	23.58
2.7%	8.45'	18.95
2.3%	8.86'	17.53'

PROFILE



MICRO-FILM INFORMATION
RECORDED BY
DATE
NO
AS-BUILT INFORMATION
CONTRACTOR MARK-1 CONSTRUCTORS
ENGINEER/SURVEYOR WILSON & COMPANY, INC.
FIELD SURVEY BY CARTESIAN SURVEYS, INC.
DRAWING BY BJH
CHECKED BY WP
DATE 7/03
DATE 7/03
DATE 7/03
BENCH MARKS
1. STANDARD ACS BRASS TABLET STAMPED "1-B20" LOCATED IN THE NE QUAD OF THE INTERSECTION OF BARSTOW ST. NE AND MODESTO AVE. NE. X=410,232.56, Y=1,524,092.45, ELEV=5444.510' (NAD 1927)
2. 10-CM-0 99984740, June/10/03, CENTRAL ZONE, (NAD 1927), ELEV=5444.510' (OLD 1929)
SURVEY INFORMATION
DATE
BY
NO

ALBUQUERQUE METROPOLITAN
ARROYO FLOOD CONTROL
AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD S.E.
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 893-8021

BID LOT 2
LA CUEVA ARROYO REACH 2
CHANNEL
PLAN & PROFILE
STA 14+50 TO STA 26+00

REVISIONS	NO	DATE	REMARKS	BY

DESIGN	JDV	WCEA NO X1218035	DATE MAR 2002
DRAWN	DS	PROJECT NO 677181	SHEET NO BL2-2
CHECK	DSA		

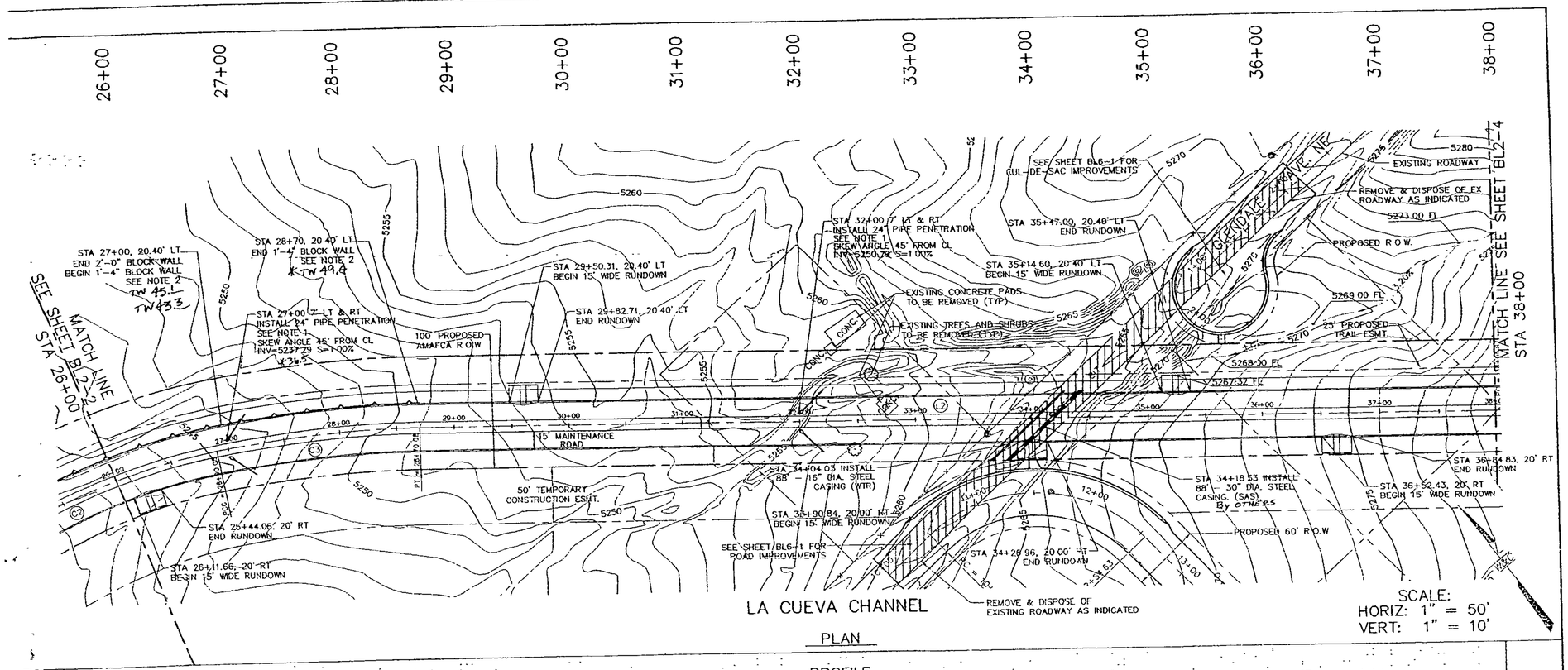
11/11/02

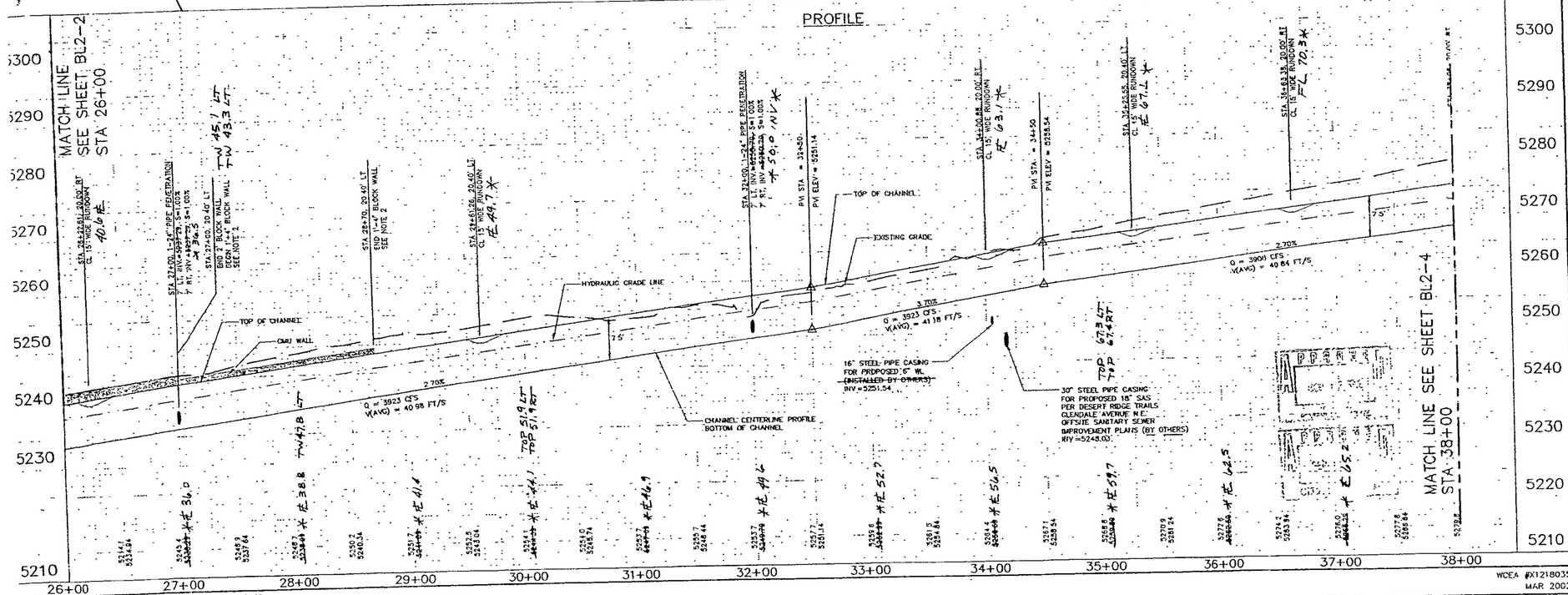
WCEA #X1218035
MAR 2002

P:\X1218035\X1218035-R\M\SHEETS\BL3SPNP1.DWG\04-02-02

ADDITIONAL INFORMATION SEE BL1-1

RECORD DRAWINGS





WCEA #X1218035
MAR 2002

\P\ X1218035\X1218035-R\M\SHEETS\B1JSPH2.DWG\04-02-02

GENERAL NOTES:

1. SEE PIPE PENETRATION DETAIL ON SHEET G2
2. SEE BLOCK WALL DETAIL ON SHEET G1

LINE TABLE		
LINE	LENGTH	BEARING
L2	935.89	S46°07'03"E

CURVE TABLE		
CURVE	LENGTH	RADIUS
C2	198.74	500.00
C3	180.00	1000.00

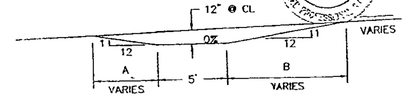
SURVEYOR'S CERTIFICATION

I, WILL PLOTNER JR, A DULY QUALIFIED REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO DO HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND AS-BUILT SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION; THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION; AND THAT THIS "AS-BUILT" INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS OR CALCULATIONS ENGINEERING OF ITEM(S) OF THE RECORD DRAWINGS

Will Plotner

W.F.I. PLOTNER JR NMPS 14271

WILL F. PLOTNER JR. NEW MEXICO 14271 REGISTERED PROFESSIONAL SURVEYOR



SEE CHART FOR DIMENSIONS

RUNDOWN LENGTH DIMENSIONS

NTS

DIMENSIONS		
CHANNEL SLOPE	A	B
3.7%	7.54'	23.58'
2.7%	8.45'	18.95'
2.3%	8.86'	17.53'

BENCH MARKS

1. STANDARD AGS BRASS TABLET, STAMPED "1-B26", LOCATED IN THE NE QUAD OF THE INTERSECTION OF GLENDALE AVE. NE AND MODESTO AVE. NE., N=1,524,932.46, E=1,537,237.55, ELEV=5474.010' (NAD 1927)
2. STANDARD AGS BRASS TABLET, STAMPED "1-B25", LOCATED IN THE NE QUAD OF THE INTERSECTION OF BARSTOW ST. NE AND MODESTO AVE. NE., N=1,525,237.55, E=1,537,237.55, ELEV=5474.010' (NAD 1927), CENTRAL ZONE, (NAD 1927), 33°06'02.23"N 106°07'02.23"W

MICRO-FILM INFORMATION

NO	DESCRIPTION	BY	DATE
	MARK V. CONSULTANTS	RECORDED BY	
	CARTESIAN SURVEYS	SUPERVISION BY	DATE 7/03
	STATE ENGINEER	DRAWINGS BY	BLIZ
	CONSTRUCTION MANAGER	DRAWINGS CHECKED BY	CHRISTIANSEN
	CONTRACTOR	CONSTRUCTED BY	DATE 7/03

AS-BUILT INFORMATION

SURVEY INFORMATION

NO	DATE	BY

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD S.E.
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 898-8021

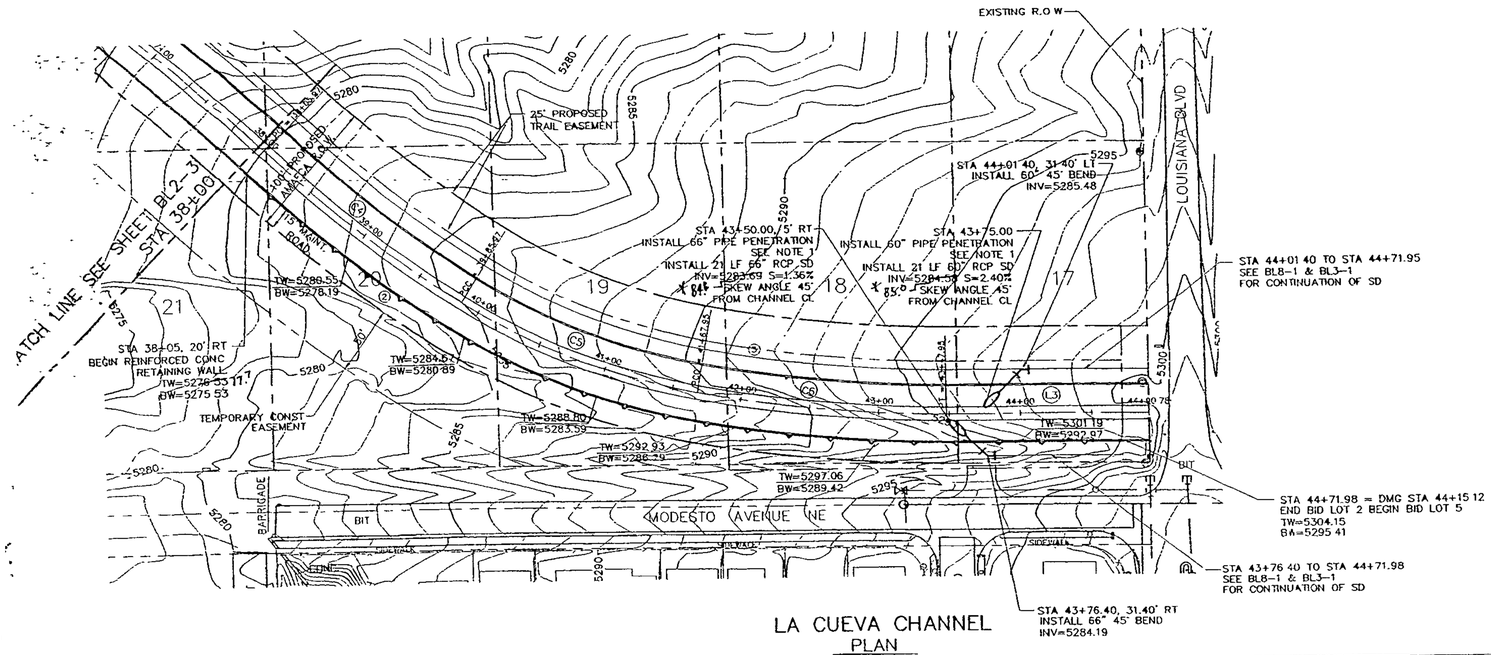
BID LOT 2
LA CUEVA ARROYO REACH 2
CHANNEL
PLAN & PROFILE
STA. 26+00 TO STA. 38+00

REVISIONS	NO.	DATE	REMARKS	BY

DESIGN	JDV	WCEA NO X1218035	DATE MAR 2002
DRAWN	DS	PROJECT NO. 677181	SHEET BL2-3
CHECK	DSA		

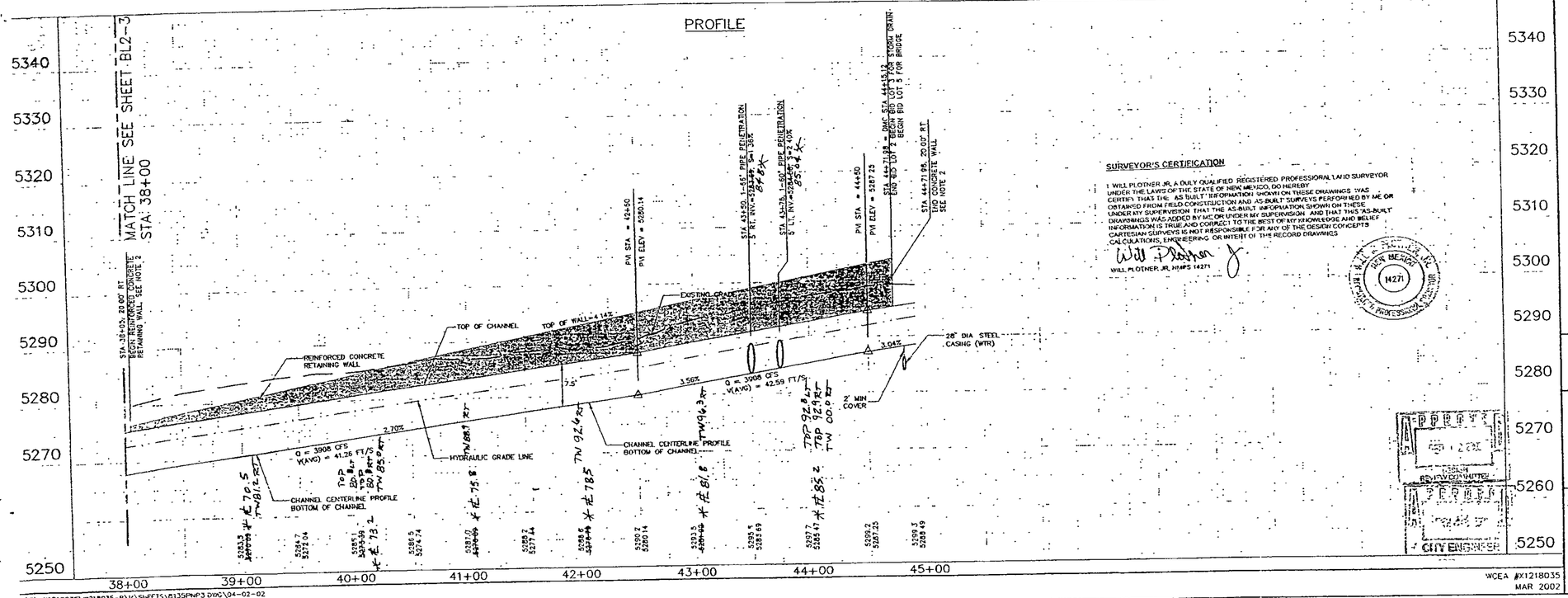
RECORD DRAWINGS

38+00 39+00 40+00 41+00 42+00 43+00 44+00 45+00



LA CUEVA CHANNEL
PLAN

SCALE:
HORIZ: 1" = 50'
VERT: 1" = 10'

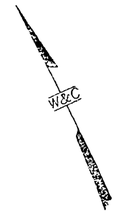


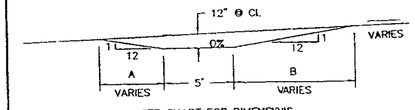
GENERAL NOTES:

1 SEE PIPE PENETRATION DETAIL ON SHEET G2.
2 SEE REINFORCED CONCRETE RETAINING WALL DETAIL ON SHEET BL2-7.
3 LOT 16 & 17 ARE AVAILABLE FOR CONTRACTORS YARD (SEE SPECIAL CONDITIONS)

LINE TABLE		
LINE	LENGTH	BEARING
L3	222.03	S89°46'50"E

CURVE TABLE		
CURVE	LENGTH	RADIUS
C4	180.00	950.00
C5	181.98	475.00
C6	180.00	950.00





SEE CHART FOR DIMENSIONS

RUNDOWN LENGTH DIMENSIONS
NTS

DIMENSIONS		
CHANNEL SLOPE	A	B
3.7%	7.54'	23.58'
2.7%	8.45'	18.95'
2.3%	8.86'	17.53'

SURVEYOR'S CERTIFICATION

I WILL PLOTNER JR, A DULY QUALIFIED REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE "AS BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND AS-BUILT SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION AND THAT THIS "AS-BUILT" INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS CALCULATIONS, ENGINEERING OR INTENT OF THE RECORD DRAWINGS

Will Plotner Jr.
WILL PLOTNER JR, NMPS 14271

NEW MEXICO 14271 REGISTERED PROFESSIONAL SURVEYOR

CITY ENGINEER

AS-BUILT INFORMATION
CONTRACTOR Mirabal & Chavarria Contractors
CONTRACT DATE 7/03
WORK BY CONTRACTOR
FILED
RECORDED BY
DATE 7/03
INSPECTED BY BHT
DATE 7/03
DRAWINGS CHECKED BY
DATE 7/03
MICRO-FILM INFORMATION
NO
DATE

BENCH MARKS
A STANDARD ACE BRASS TABLET, STAMPED "1-2892", SET IN CONCRETE AT THE INTERSECTION OF BARSTOW ST NE AND MODESTO AVE NE
N=1,510,237.561, E=1,524,093.45, ELEV=5474.510 (NAD 1927)
0-0=0 09'56'40", Δ=0°10'23", CENTRAL ZONE, (NAD 1983)

SURVEY INFORMATION
NO. | DATE | BY

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD SE
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 898-8021

BID LOT 2
LA CUEVA ARROYO REACH 2
CHANNEL
PLAN & PROFILE
STA 38+00 TO 44+71.98

REGISTERED PROFESSIONAL ENGINEER 14033 4/11/02

REVISIONS	NO.	DATE	REMARKS	BY

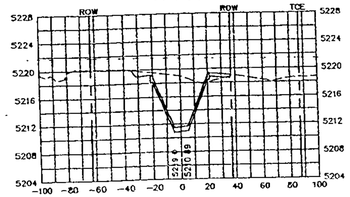
DESIGN	JDV	WCEA NO X1218035	DATE MAR 2002
DRAWN	DS	PROJECT NO. 677181	SHEET NO BL2-4
CHECK	DSA		

WCEA #X1218035
MAR 2002

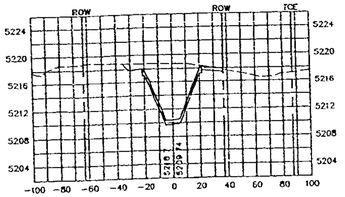
I:\P\X1218035\X1218035-R\K\SHEETS\BL3SPMP3.DWG\04-02-02

NOTE 1: SEE SHEET BL2-7 FOR CUT & FILL VOLUMES

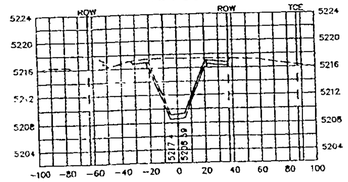
17+00



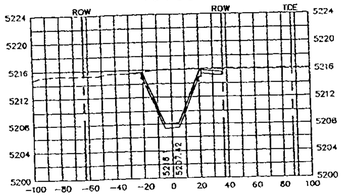
16+50



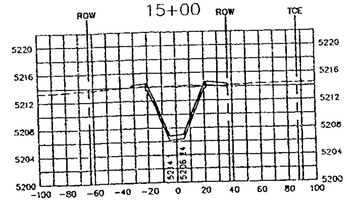
16+00



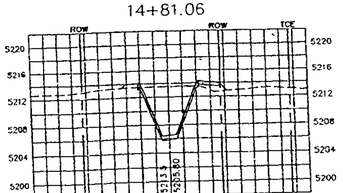
15+50



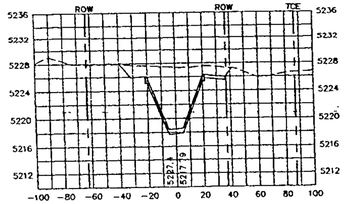
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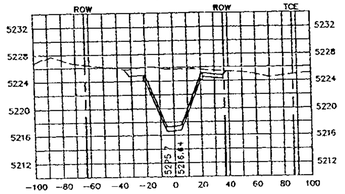
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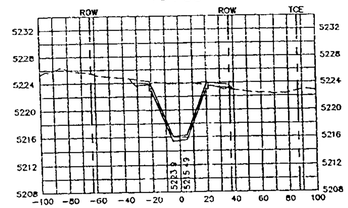
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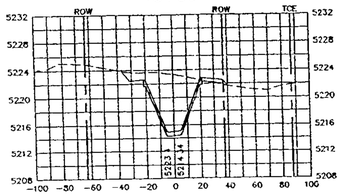
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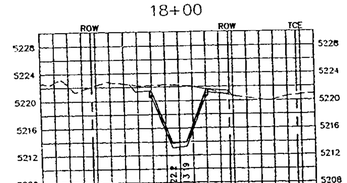
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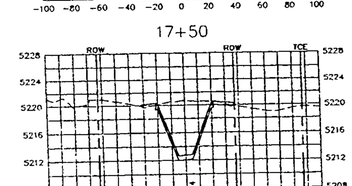
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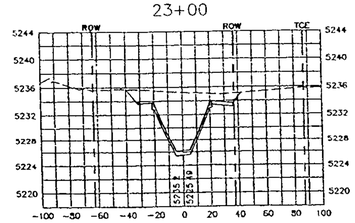
18+00



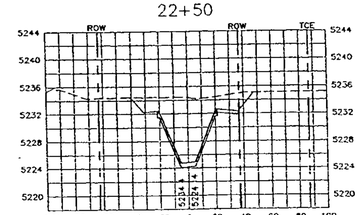
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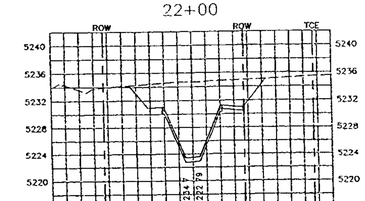
23+00



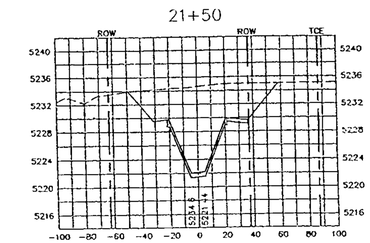
22+50



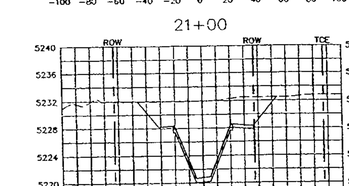
22+00



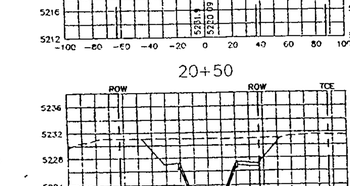
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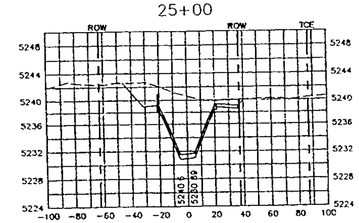
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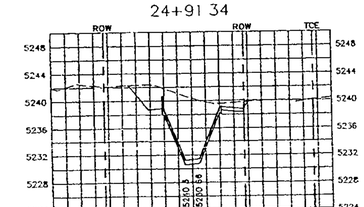
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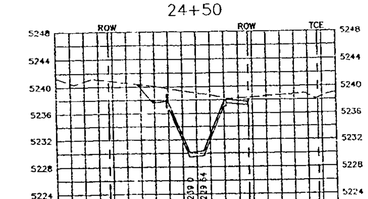
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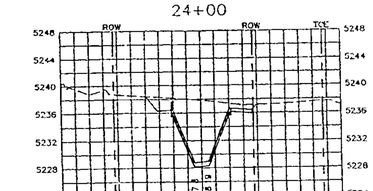
24+91 34



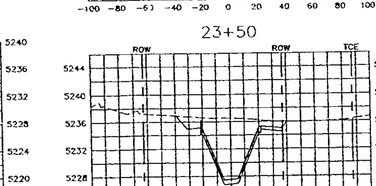
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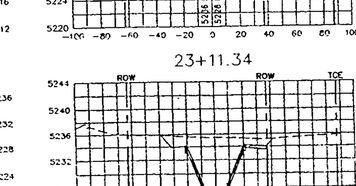
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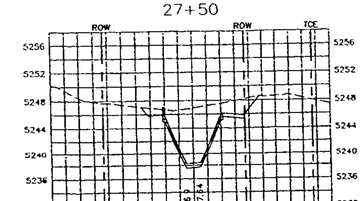
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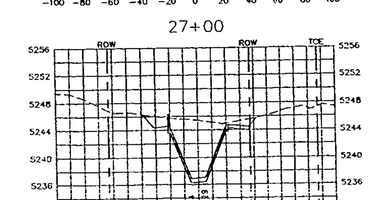
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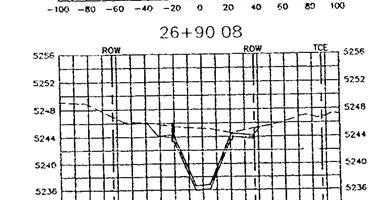
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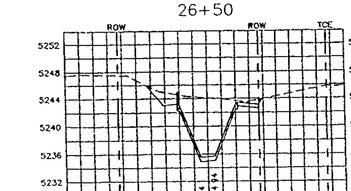
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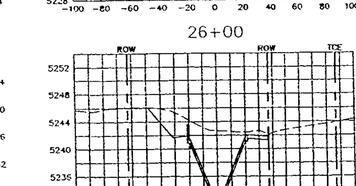
26+90 08



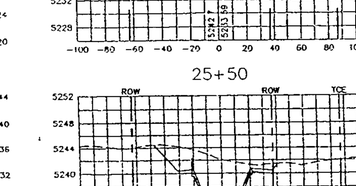
26+50



26+00



25+50



NOTE 2: ELEVATION SHOWN IS TO CHANNEL SUBGRADE.

MICRO-FILM INFORMATION

AS-BUILT INFORMATION

CONTRACTOR: MOORE + SQUARE CONTRACTORS
WORK STAKED BY: GARRETT DATE 7/03 INSPECTOR'S DIARY: DATE 7/03
CONSTRUCTION BY: SUNLAND CONSTRUCTION, INC. DATE 7/03
CONTRACTOR'S DIARY: DATE 7/03

NO.	DATE	RECORDED BY

BENCH MARKS

A STANDARD ACS BRASS TABLET, STAMPED "1-B25" LOCATED IN THE NE QUAD OF THE INTERSECTION OF BARSTOW ST NE AND MODESTO AVE NE. (e=1510,237.56, n=1,524,092.45, C=0.99984740, Ae=0°10'23", CENTRAL ZONE, (NAD 1927), ELE=5474.510' (SLD 1929)

SURVEY INFORMATION

NO.	DATE	BY

SEP 12 2002

CITY ENGINEER

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD S.E.
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 896-8021

BID LOT 2
LA CUEVA CHANNEL

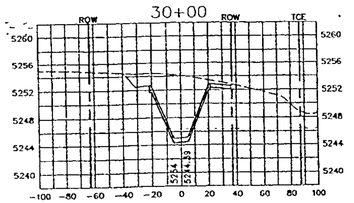
LA CUEVA CHANNEL CROSS SECTIONS

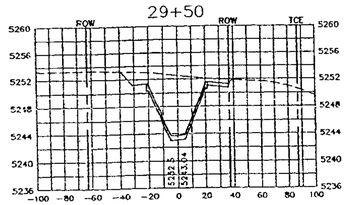
REVISIONS	NO.	DATE	REMARKS	BY

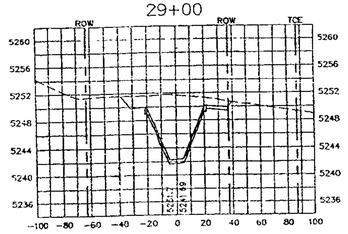
DESIGN	JCV	WCEA NO X1218035	DATE MAR 2002
DRAWN	JLB	PROJECT NO. 677181	SHEET NO BL2-5
CHECK	DSA		

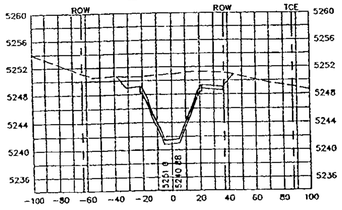
WCEA # X1218035
MAR 2002

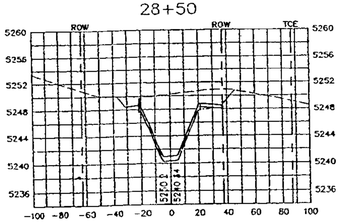
NOTE 1: SEE SHEET BL2-7 FOR CUT & FILL VOLUMES
NOTE 2: ELEVATION SHOWN IS TO CHANNEL SUBGRADE

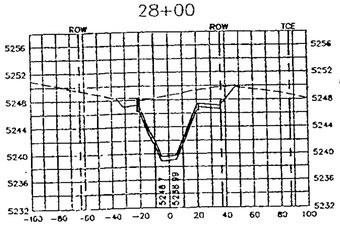


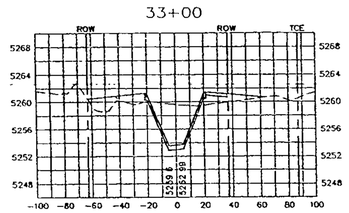


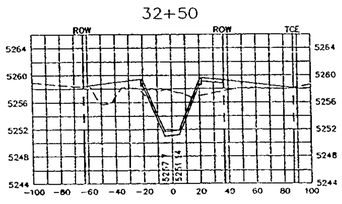


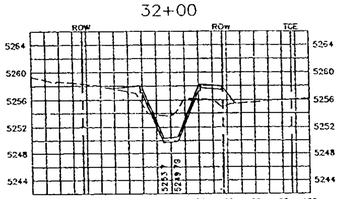


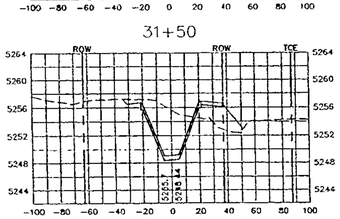


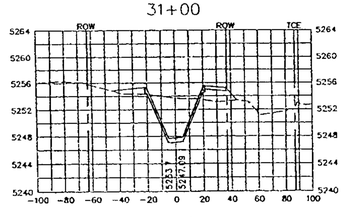


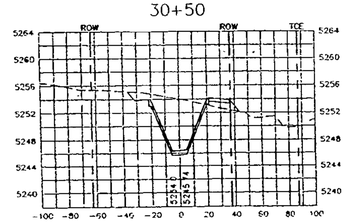


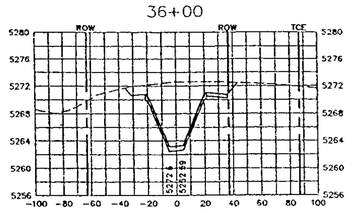


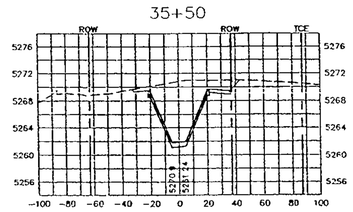


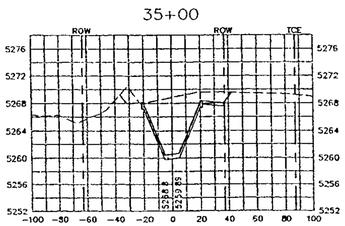


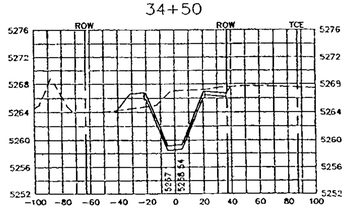


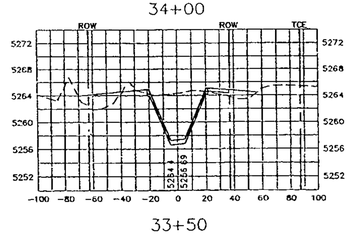


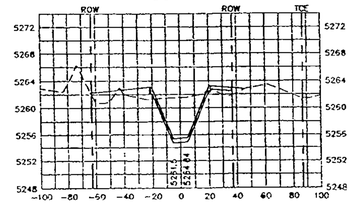


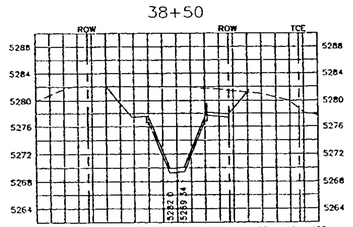


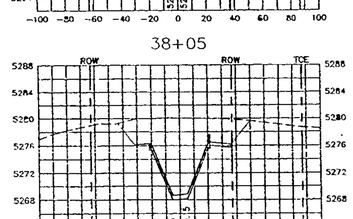


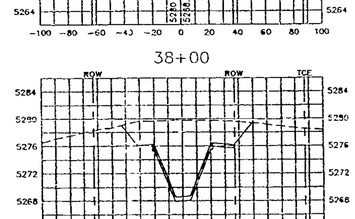


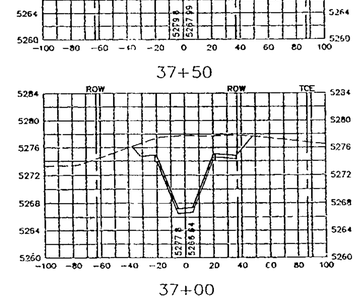


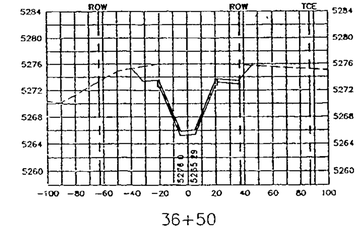


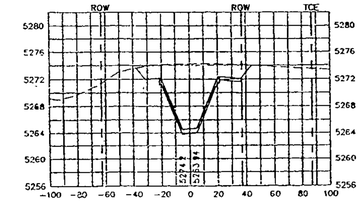


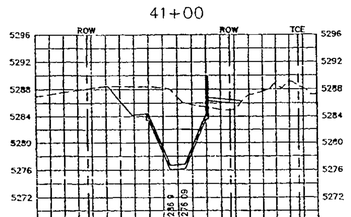


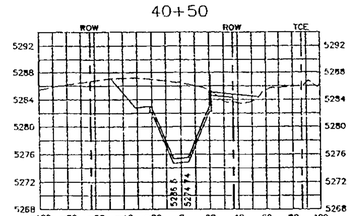


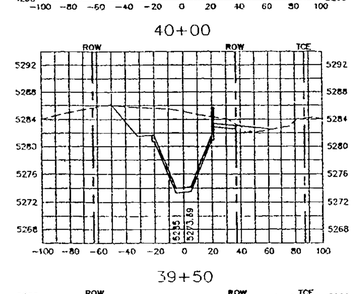


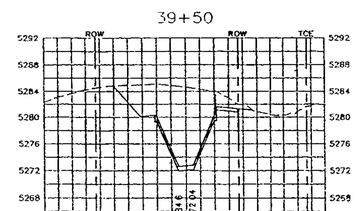


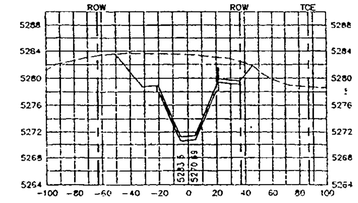












MICRO-FILM INFORMATION
RECORDED BY
DATE
NO

AS-BUILT INFORMATION
CONTRACTOR: MUNAE & EDWART CONTRACTORS DATE 7/03
WORK DIRECTED BY: [illegible] DATE 7/03
REVISIONS: [illegible] DATE 7/03
LOCATION AS STAKED BY: [illegible] DATE 7/03

BENCH MARKS
A STANDARD ACS BRASS TABLET, STAMPED "1-B20" LOCATED IN THE NE QUAD OF THE INTERSECTION OF BARSTOW ST NE AND MOSSTO AVE NE. X=410,237.58, Y=1,524,092.45, G-G=0.99984740, Δ=0°10'23", CENTRAL ZONE, (NAD 1927), ELEV=5474.510' (USD 1929)

SURVEY INFORMATION
NO | DATE | BY

WCEA #X1218035
MAR 2002

ALBUQUERQUE METROPOLITAN
ARROYO FLOOD CONTROL
AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD S E
SUITE 100
RIO RANCHO NEW MEXICO
87124
(505) 896-8021

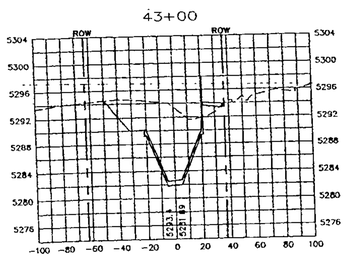
BID LOT 2
LA CUEVA CHANNEL

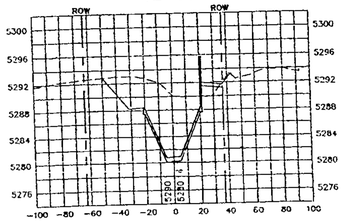
LA CUEVA CHANNEL
CROSS SECTIONS

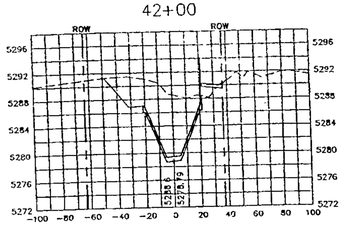
REVISIONS	NO	DATE	REMARKS	BY

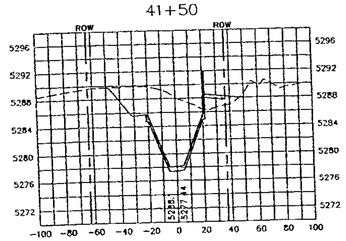
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DRAWN	JLB	PROJECT NO	677181	SHEET NO	BL2-6
CHECK	DSA				

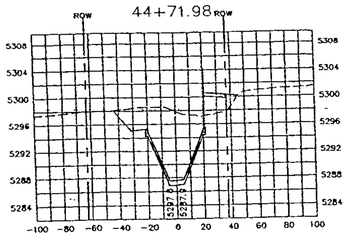
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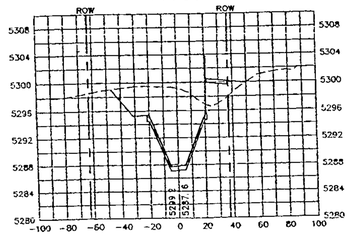


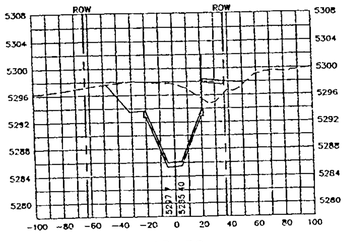


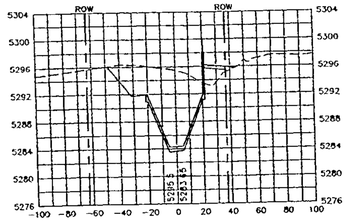












STATION	AREAS Square Feet		VOLUMES Cubic Yards		CUMULATIVE VOLUMES Cubic Yards	
	CUT	FILL	CUT	FILL	CUT	FILL
14+81.06	197.52	18.66				
15+00	207.08	4.64	141.91	8.17	141.91	8.17
15+50	249.40	0.84	422.67	5.08	564.58	13.25
16+00	264.68	0.00	476.01	0.78	1040.59	14.03
16+50	269.28	0.04	494.41	0.04	1535.00	14.06
17+00	215.74	4.93	449.10	4.60	1984.09	18.66
17+50	235.84	4.39	418.13	8.62	2402.22	27.28
18+00	264.00	0.89	462.82	4.89	2865.04	32.17
18+50	265.08	2.63	489.89	3.26	3354.93	35.43
19+00	237.96	3.00	465.78	5.21	3820.70	40.64
19+50	291.10	0.00	489.87	2.77	4310.58	43.41
20+00	343.12	0.00	587.24	0.00	4897.82	43.41
20+50	552.37	0.00	829.15	0.00	5726.97	43.41
21+00	545.19	0.00	1016.25	0.00	6743.22	43.41
21+50	668.21	0.00	1123.52	0.00	7866.74	43.41
22+00	534.51	0.00	1113.64	0.00	8980.38	43.41
22+50	432.54	0.00	895.42	0.00	9875.79	43.41
23+00	365.85	0.00	739.25	0.00	10615.05	43.41
23+11.34	332.78	0.00	146.68	0.00	10761.73	43.41
23+50	327.42	0.00	472.81	0.00	11234.54	43.41
24+00	328.54	0.00	607.74	0.00	11842.28	43.41
24+50	326.18	0.00	607.30	0.00	12449.58	43.41
24+91.34	367.97	0.00	533.34	0.00	12982.93	43.41
25+00	371.20	0.00	119.64	0.00	13102.57	43.41
25+50	389.22	0.00	710.90	0.00	13813.47	43.41
26+00	351.20	0.00	693.00	0.00	14506.47	43.41
26+50	415.40	0.00	715.35	0.00	15221.82	43.41
26+90.08	300.05	0.00	532.61	0.00	15754.43	43.41
27+00	379.65	0.00	124.86	0.00	15879.29	43.41
27+50	420.63	0.00	739.43	0.00	16618.72	43.41
28+00	357.60	0.00	717.79	0.00	17336.51	43.41
28+50	367.58	0.00	669.42	0.00	18005.93	43.41
28+70.08	368.86	0.00	273.30	0.00	18279.24	43.41
29+00	341.38	0.00	393.53	0.00	18672.76	43.41
29+50	318.73	0.00	611.21	0.00	19283.98	43.41
30+00	321.21	0.00	592.54	0.00	19876.52	43.41
30+50	237.67	18.03	517.48	16.69	20394.00	60.10
31+00	159.96	46.36	368.18	59.62	20762.18	119.72
31+50	195.34	71.78	328.99	109.39	21091.16	229.12
32+00	95.03	62.29	268.87	124.15	21360.03	353.26
32+50	146.86	54.52	223.97	108.16	21584.00	461.42
33+00	157.84	38.49	282.13	86.13	21866.13	547.55
33+50	163.20	30.14	297.26	63.55	22163.39	611.10
34+00	201.86	9.70	338.02	36.89	22501.41	648.00
34+50	227.12	32.98	397.21	39.52	22898.62	687.51
35+00	302.04	0.16	489.97	30.68	23388.58	718.20
35+50	316.51	0.00	572.74	0.15	23961.32	718.35
36+00	348.37	0.00	615.63	0.00	24576.95	718.35
36+50	376.37	0.00	671.06	0.00	25248.00	718.35
37+00	413.86	0.00	731.69	0.00	25979.69	718.35
37+50	436.72	0.00	787.57	0.00	26767.27	718.35
38+00	509.21	0.00	875.86	0.00	27643.13	718.35
38+05.97	519.40	0.00	113.80	0.00	27756.93	718.35
38+50	594.45	0.00	909.06	0.00	28665.99	718.35
39+00	595.61	0.00	1101.61	0.00	29767.60	718.35
39+50	555.68	0.00	1063.90	0.00	30831.49	718.35
39+85.97	512.82	0.00	709.58	0.00	31541.07	718.35
40+00	493.87	0.00	259.85	0.00	31800.91	718.35
40+50	469.43	0.00	885.04	0.00	32685.95	718.35
41+00	427.68	0.00	821.55	0.00	33507.50	718.35
41+50	432.89	0.00	787.28	0.00	34294.79	718.35
41+67.95	443.50	0.00	288.41	0.00	34583.19	718.35
42+00	469.54	0.00	540.22	0.00	35123.41	718.35
42+50	496.87	0.00	893.53	0.00	36016.94	718.35
43+00	520.77	0.00	941.07	0.00	36958.00	718.35
43+47.95	517.63	0.00	921.18	0.00	37879.19	718.35
43+50	519.10	0.00	39.26	0.00	37918.45	718.35
44+00	508.86	0.00	951.81	0.00	38870.26	718.35
44+50	503.76	0.00	937.61	0.00	39807.87	718.35
44+90.78	480.92	0.00	743.57	0.00	40551.44	718.35
			0.00	0.00	40551.44	718.35

NOTE: CUMULATIVE VOLUME DOES NOT INCLUDE FILL BEHIND PROPOSED RETAINING WALL (STA 38+05 TO STA 44+71.98)

AS-BUILT INFORMATION
CONTRACTOR MARC + EDWARD CONTRACTORS DATE 1/03
WORK CERTIFICATION FILED DATE 1/03 ACCEPTANCE BY DATE
FIELD VERIFICATION BY DATE 1/03 DOMINION ENGINEERING DATE 1/03

MICRO-FILM INFORMATION
RECORDED BY DATE NO

BENCH MARKS
A STANDARD ACS BRASS TABLET, STAMPED "1-B26" LOCATED IN THE NE QUAD OF THE INTERSECTION OF BARSTOW ST NE AND MOSSTO AVE NE. N=1410,237.55, E=1,524,092.45, G-O=0 9996470, zone 0'10'23", CENTRAL ZONE, (NAD, 1927), ELEV=5474.910 (GSD, 1929)

SURVEY INFORMATION
NO. | DATE | BY

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD SE
SUITE 100
RIO RANCHO NEW MEXICO
87124
(505) 998-8021

BID LOT 2
LA CUEVA CHANNEL

LA CUEVA CHANNEL
CROSS SECTIONS

REVISIONS NO	DATE	REMARKS	BY

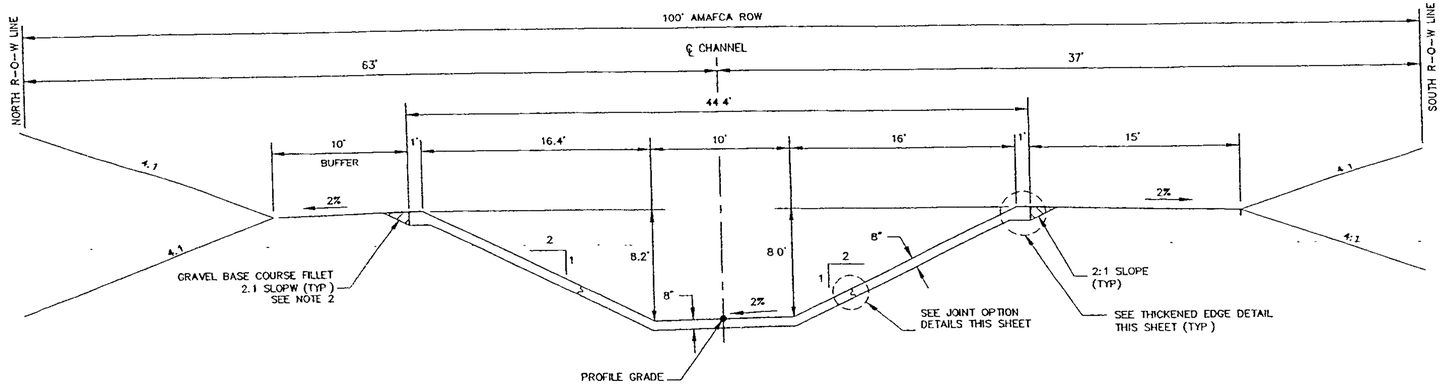
DESIGN	JMV	WCEA NO X1218035	DATE MAR 2002
DRAWN	JLB	PROJECT NO 677181	SHEET NO BL2-7
CHECK	DSA		

WCEA #X1218035
MAR 2002

RECEIVED
DEC 17 2002
ENGINEERING
SERVICES DIVISION

RECEIVED
DEC 12 2002
CITY ENGINEER

RECORD DRAWINGS

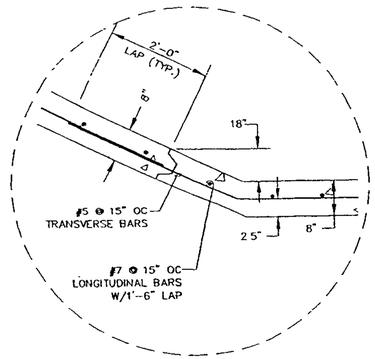


TYPICAL SECTION STA 15+66.06 TO 16+00

SCALE 1" = 5'

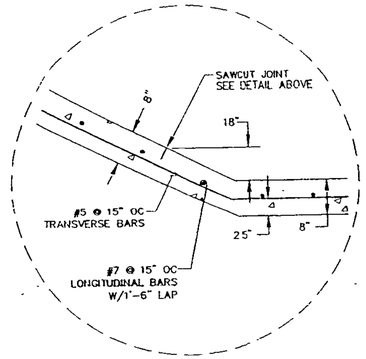
NOTE:

1. SEE JOINT OPTION DETAILS AND THICKENED EDGE DETAIL THIS SHEET FOR CHANNEL STEEL REINFORCEMENT
2. CHANNEL LINING SHALL BE 3,000 PSI TINTED CONCRETE



JOINT OPTION 1

NOT TO SCALE



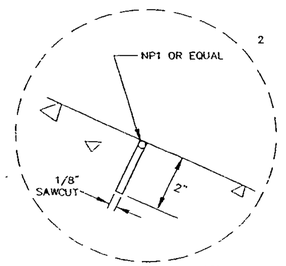
JOINT OPTION 2

NOT TO SCALE

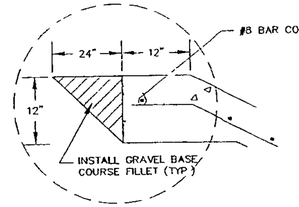
CHANNEL INVERT-SIDE SLOPE INTERSECTION DETAIL

NOTE:

1. EXPANSION/CONTRACTION AND CONSTRUCTION JOINTS SHALL COMPLY WITH SUBSECTION 511 AND AS APPROVED BY THE ENGINEER
2. STEEL SHALL BE SET ON INDIVIDUAL SAND CHAIRS SAND CHAIRS SHALL BE SET ON A 5'-0" MAXIMUM SPACING GRID



SAWCUT JOINT DETAIL

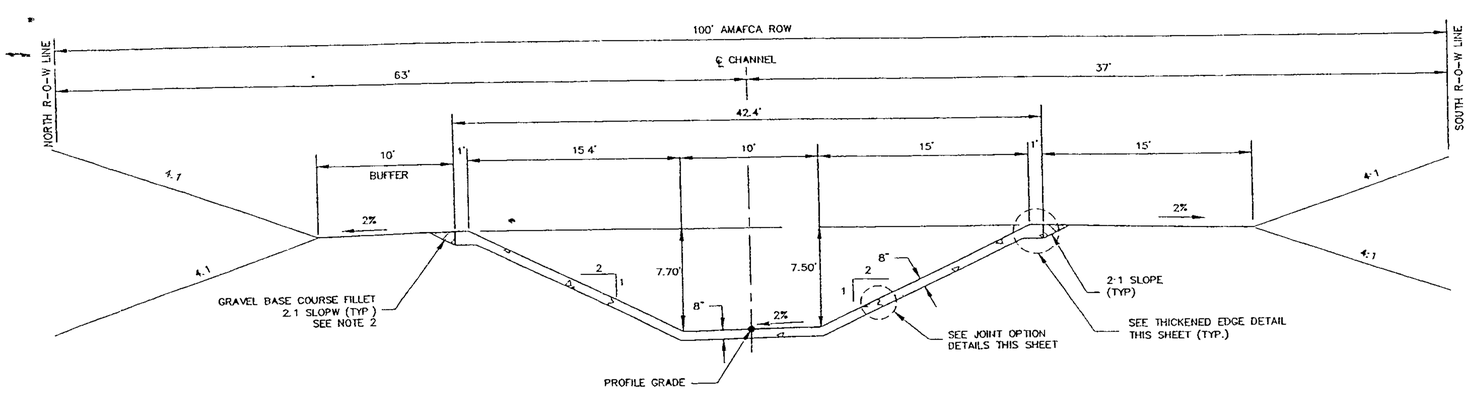


THICKENED EDGE DETAIL

NOT TO SCALE

NOTE.

1. ALL CHANNEL SURFACES SHALL BE FINISHED WITH BRIDGE FLOAT FINISH, DOUBLE TINED.
2. ALL CHANNEL CONCRETE SHALL BE TINTED SAN DIEGO BUFF 1 LB PER SACK OF CEMENT.
3. GRAVEL BASE COURSE FILLET IS INCIDENTAL TO COST OF 6" GRAVEL BASE COURSE.
4. #8 CONTINUOUS BAR SHALL BE SET ON 6" SAND CHAIRS W/ 5'-0" SPACING GRID



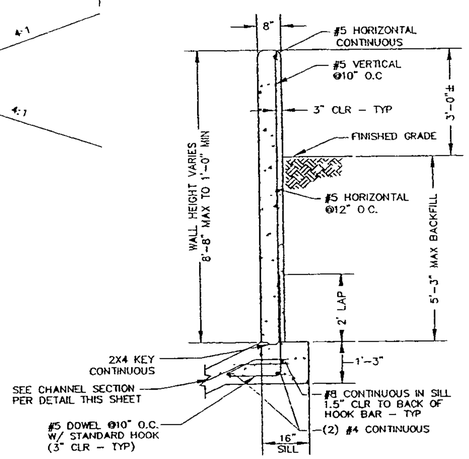
TYPICAL SECTION STA 16+10 TO E.O.P.

SCALE 1" = 5'

NOTE:

1 SEE JOINT OPTION DETAILS AND THICKENED EDGE DETAIL THIS SHEET FOR CHANNEL STEEL REINFORCEMENT

2 CHANNEL LINING SHALL BE 3,000 PSI TINTED CONCRETE



TYPICAL WALL SECTION STA 38+05 TO STA 44+72

NOT TO SCALE

NOTE:

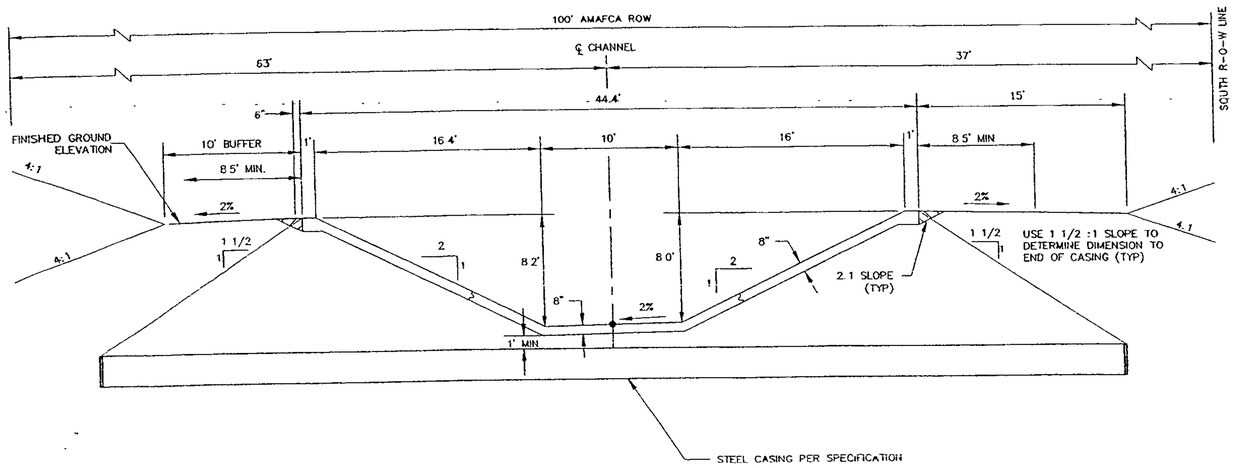
1 WALL SHALL BE 3,000 PSI STRUCTURAL CONCRETE WITH THORO COAT.

WCEA #X1218035
MAR 2002

MICRO-FILM INFORMATION

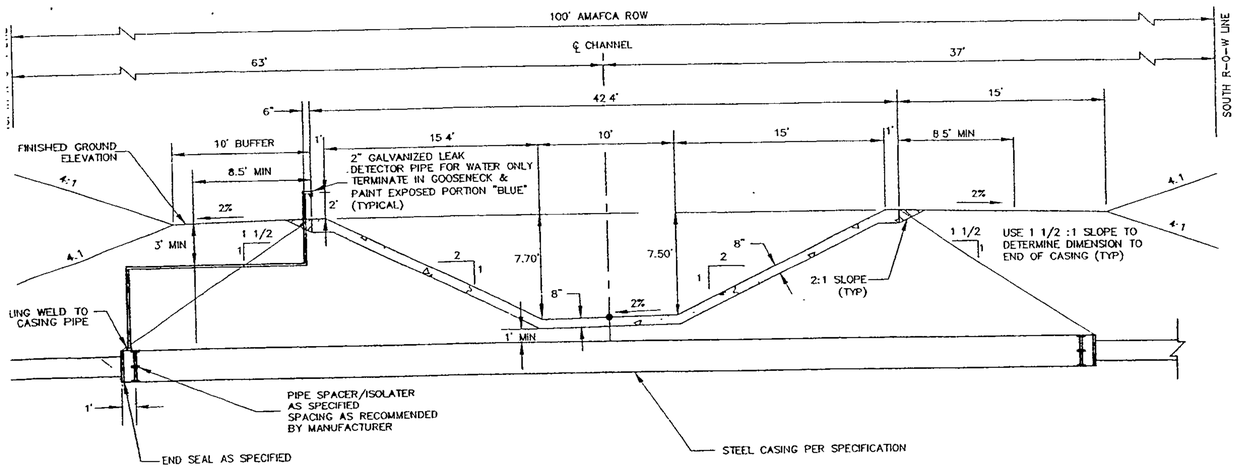
AS-BUILT INFORMATION

CONTRACTOR: MORRIS & CRAMER CONTRACTORS
START DATE: 7/1/03 COMPLETION DATE: 7/1/03
RECORDED BY: NO
DRAWING NO. 84-7
CONTRACT TIME: 45 WORKING DAYS
DATE: 7/1/03
DATE: 7/1/03
DATE: 7/1/03



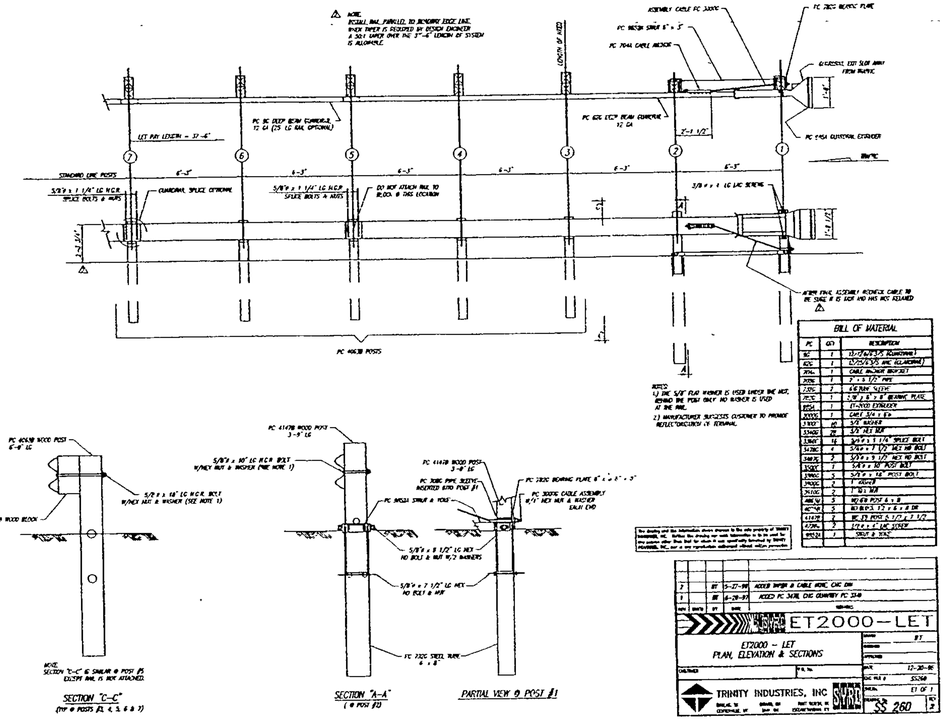
STEEL CASING DETAIL W/O DETECTOR PIPE

@ SAN PEDRO BLVD STA 15+01



STEEL CASING DETAIL

@ LOUISIANA BLVD STA 44+81
@ GLENDALE AVE STA 34+04
@ GLENDALE AVE STA 34+18



GUARD RAIL DETAIL

BILL OF MATERIAL

PC	QTY	DESCRIPTION
8C	1	12-7/8"ø TS (SUBCHORD)
6DL	1	0.75"ø X 5" BAR (SLASHING)
30AL	1	CABLE ANCHOR BRACKET
30BL	1	3" x 1 1/2" PIPE
30CC	1	6'8" CABLE ASSY
30CL	1	1/2" x 3" x 6" BEARING PLATE
8DCL	1	11-5/8"ØD STRINGER
8DCS	1	CANT 3/4 x 8"
33ND	20	5/8" HEX NUT
33WD	20	5/8" FLAT WASHER
33BD	18	5/8"Ø x 1 1/4" SPLICE BOLT
34BC	2	3/4"Ø x 7 1/2" HCT HD BOLT
34BE	2	5/8"Ø x 9 1/2" HCT HD BOLT
33BC	1	5/8"Ø x 10" POST BOLT
33BG	1	5/8"Ø x 12" HCPCT BOLT
34DC	2	1 HOLE
34DD	2	1" SQ NUT
8BCW	2	10 GA POST 6" x 8"
8BCW	2	10 GA POST 12" x 6" x 8" DW
33CB	2	BC (2) POST 3 1/2" x 3 1/2"
33BN	3	1/2"Ø x 1" LAG SCREW
8DCM	1	SHELF & YOKE

NO	BY	DATE	REVISIONS
7	BT	5-22-98	ADDED WIRE & CABLE WORK, CHC 288
1	BE	6-29-97	ADDED PC 30BL DWG (CHANGED PC 33A)

ET2000-LET

ET2000 - LET PLAN, ELEVATION & SECTIONS

DRAWN BT 12-30-96 SSC NO 5526 SHEET 1 OF 1

TRINITY INDUSTRIES, INC SAFENET 2000 $S 260

MICRO-FILM INFORMATION
RECORDED BY DATE
FILM NO

AS-BUILT INFORMATION
CONTRACTOR: PRICE & FRANKLIN CONSTRUCTORS DATE 1/03
PLANS BY: PRICE & FRANKLIN DATE 1/03
ACCEPTANCE BY: CORPS DATE 1/03
DRAWING NO: 33-5X24-01 FSC
CONVERTED TO MICROFILM BY: DATE

BENCH MARKS
A STANDARD ACS BRASS TABLET, STAMPED "1-B20" LOCATED IN THE INTERSECTION OF BARSTOW ST. NE AND MODESTO AVE. NE. X=415,237.56, Y=1,524,092.45, ELEV.=5474.510' (SEA LEVEL DATUM OF 1929), GRID=0.99994740, ROTATION=0°10'23", CENTRAL ZONE, (NAD 1927), ELEV.=5474.510' (SEA LEVEL DATUM OF 1929)

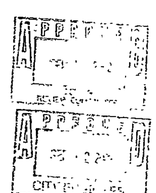
SURVEY INFORMATION
NO | BY | DATE

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

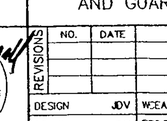
BID LOT 2
LA CUEVA CHANNEL

STEEL CASING DETAILS AND GUARD RAIL DETAILS

2600 THE AMERICAN ROAD S E
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 898-8021



WCEA #X1218035
MAR 2002



REVISIONS	NO.	DATE	REMARKS	BY

DESIGN	JDV	WCEA NO X1218035	DATE MAR 2002
DRAWN	JLB	PROJECT NO. 677181	SHEET NO BL2-9
CHECK	DSA		

1218035-R:\M\SHEETS\8135DTL2.DWG\04-02-02

RECORD DRAWINGS

NOTES

1 SEE BLOCK WALL DETAIL ON SHEET G-1

2 PROVIDE HANDRAIL FROM STA 45+13.12 TO STA. 47+00 PER DETAIL SHOWN ON SHEET G-1.

CURVE DATA – DESCRIBES CENTERLINE

① Δ = 16°28'11" R = 500' T = 72.36' L = 143.72'

② Δ = 15°39'07" R = 500 T = 68.72 L = 136.59'

③ Δ = 28°22'11" R = 800.00' L = 396.12 T = 202.21'

④ Δ = 29°04'14" R = 1000.00' L = 507.38' T = 259.28'

LOUISIANA BLVD. NE

PLAN

SCALE: 1" = 50'

SURVEYOR'S CERTIFICATION

I, WILL PLOTNER JR A DULY QUALIFIED REGISTERED, PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND AS BUILT SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION, THAT THE AS BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION AND THAT THIS AS BUILT INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS CALCULATIONS ENGINEERING OR INTENT OF THE RECORD DRAWINGS

Will Plotner

WILL PLOTNER JR NMPS 14271

WILL W. PLOTNER, JR. NEW MEXICO 14271 REGISTERED PROFESSIONAL SURVEYOR

LA CUEVA CHANNEL
STA. 45+13.12 TO STA. 55+00.00
SCALE HORZ 1" = 50'
VERT. 1" = 10'

SURVEY INFORMATION
FIELD NOTES BY: 110 DATE:
BENCH MARKS
"I-820", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR 1.0 MILE TO BARSTOW ST. NE, THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA IS LOCATED IN THE N E QUADRANT
STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "I-820", X = 410,237.56, Y = 1,524,082.46, G-G = .99964740
DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510' (SEA LEVEL DATUM OF 1929)
AS BUILT INFORMATION
CONTRACTOR: ANDREE & HART INCORPORATED
WORK PERFORMED BY: CARTESIAN SURVEYS CO.
ACCEPTANCE BY: CITY OF ALBUQUERQUE DATE: 9/01
CERTIFICATION BY: WILL PLOTNER JR. DATE: 7/03
DRAWINGS PREPARED BY: MICRO-FILM INFORMATION DATE: 7/03
DRAWINGS REVISED BY: DATE:

NO	DATE	REMARKS	BY
		AS BUILT	
		REVISIONS	
		DESIGN	

DESIGNED BY GJK DATE 9/01
DRAWN BY RDQ DATE 9/01
CHECKED BY DMG DATE 9/01

dmg MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

BID LOT 3
LA CUEVA ARROYO REACH 3

TITLE
CHANNEL PLAN & PROFILE
STA 45+13.12 TO STA 55+00.00

DESIGN REVIEW COMMITTEE — CITY ENGINEER — PUBLIC WORKS DIRECTOR — ENGINEER'S SEAL — LAST DESIGN UPDATE

CITY PROJECT NO 677181 | ZONE MAP NO C-19-Z | SHEET BL3-1

A:\29WP\CHANNEL\BL3-1A.DWG/04-11-02/ KJS, GJK, WJR NHV ACn, RDQ

RECORD DRAWINGS

SURVEYOR'S CERTIFICATION

I WILL FLOTHER JR. A DULY QUALIFIED REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO DO HEREBY CERTIFY THAT THE "AS BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND "AS BUILT" SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ACQUIRED BY ME OR UNDER MY SUPERVISION AND THAT THIS AS-BUILT INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS CALCULATIONS ENGINEERING OR INTENT OF THE RECORD DRAWINGS

WILL FLOTHER JR.

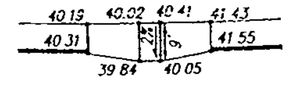
WILL N. FLOTHER JR. NEW MEXICO 14271 REGISTERED PROFESSIONAL SURVEYOR

CURVE DATA – DESCRIBES CENTERLINE

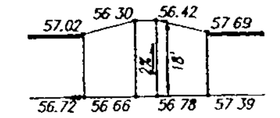
④ Δ = 29°04'14"
R = 1000.00'
L = 507.38'
T = 259.28'

NOTES

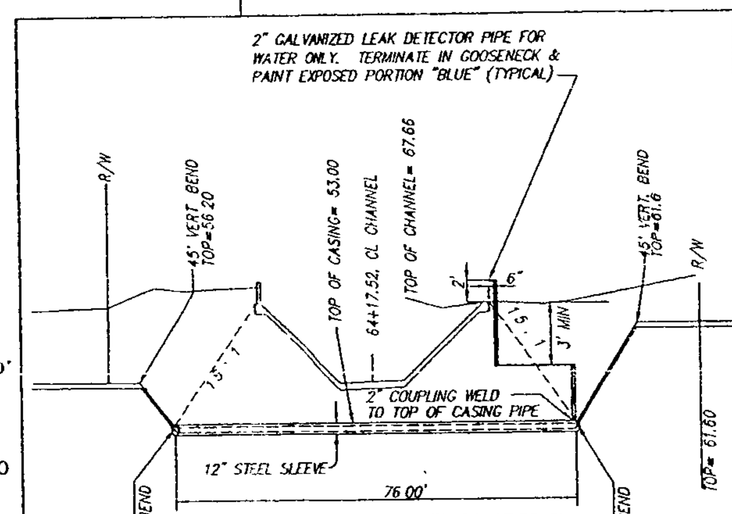
1. SEE BLOCK WALL DETAIL ON SHEET G-1.

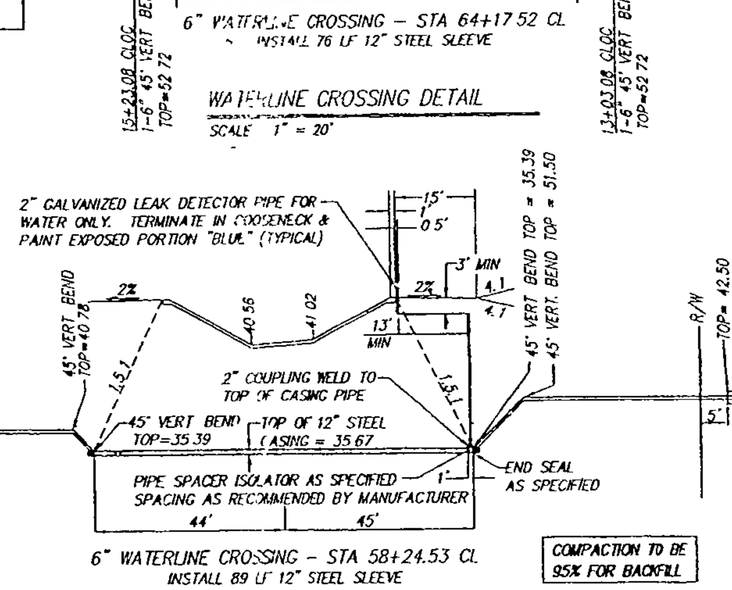


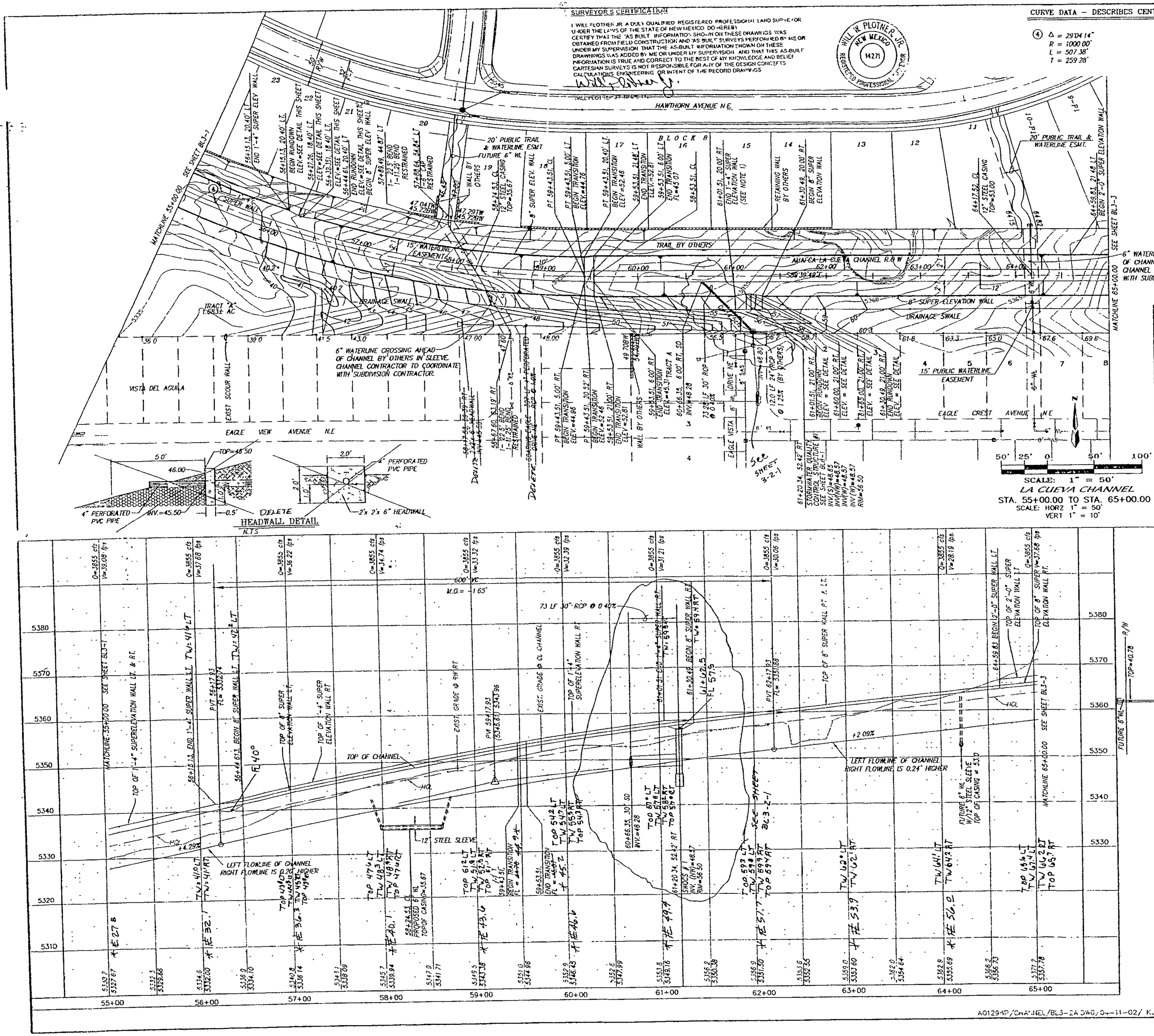
RUNDOWN DETAIL – LEFT SIDE OF CHANNEL
NTS



RUNDOWN DETAIL – RIGHT SIDE OF CHANNEL
NTS







A0129-MP/CHANNEL/BL3-2A.DWG, 04-11-02/ KJS,GJK MJR NHW DER RDO

AS BUILT INFORMATION

BENCH MARKS

"I-820", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST.; THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE.. THE STA. IS LOCATED IN THE N.E. QUADRANT

STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "I-820". X = 410,237.56, Y = 1,524,092.46, G-G = .99964740

DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)

ELEVATION = 5474.510' (SLD 1929)

CONTRACTOR MARK GOODWIN & ASSOCIATES P.A. DATE 7/03
WORK STAKED BY SURVEYS DATE 7/03
AS-BUILT BY SURVEYS DATE 7/03
FIELD CHECK BY SURVEYS DATE 7/03
CERTIFICATION BY SURVEYS DATE 7/03
AS-BUILT INFORMATION SURVEYED BY CARTESIAN SURVEYS, P.A. DATE 7/03
MICRO-FILM INFORMATION
RECORDED BY
NO DATE

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
NEW MEXICO 14271 REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	GJK
		DRAWN BY	MJR/RDQ
		CHECKED BY	DMG

DESIGNED BY GJK 9/01
DRAWN BY MJR/RDQ 9/01
CHECKED BY DMG 9/01

dmg MARK GOODWIN & ASSOCIATES P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

BID LOT 3
LA CUEVA ARROYO REACH 3

TITLE
CHANNEL PLAN & PROFILE
STA 55+00 TO 65+00

DESIGN REVIEW COMMITTEE
CITY ENGINEER
LAST DESIGN UPDATE
NO. DATE

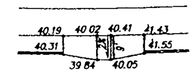
CITY PROJECT NO. 677181
ZONE MAP NO C-19-Z
SHEET BL3-2

CURVE DATA – DESCRIBES CENTERLINE

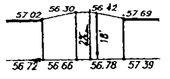
④ Δ = 29°04'14"
R = 1000.00'
L = 507.38'
T = 259.28'

NOTES

*. SEE BLOCK WALL DETAIL ON SHEET G-1

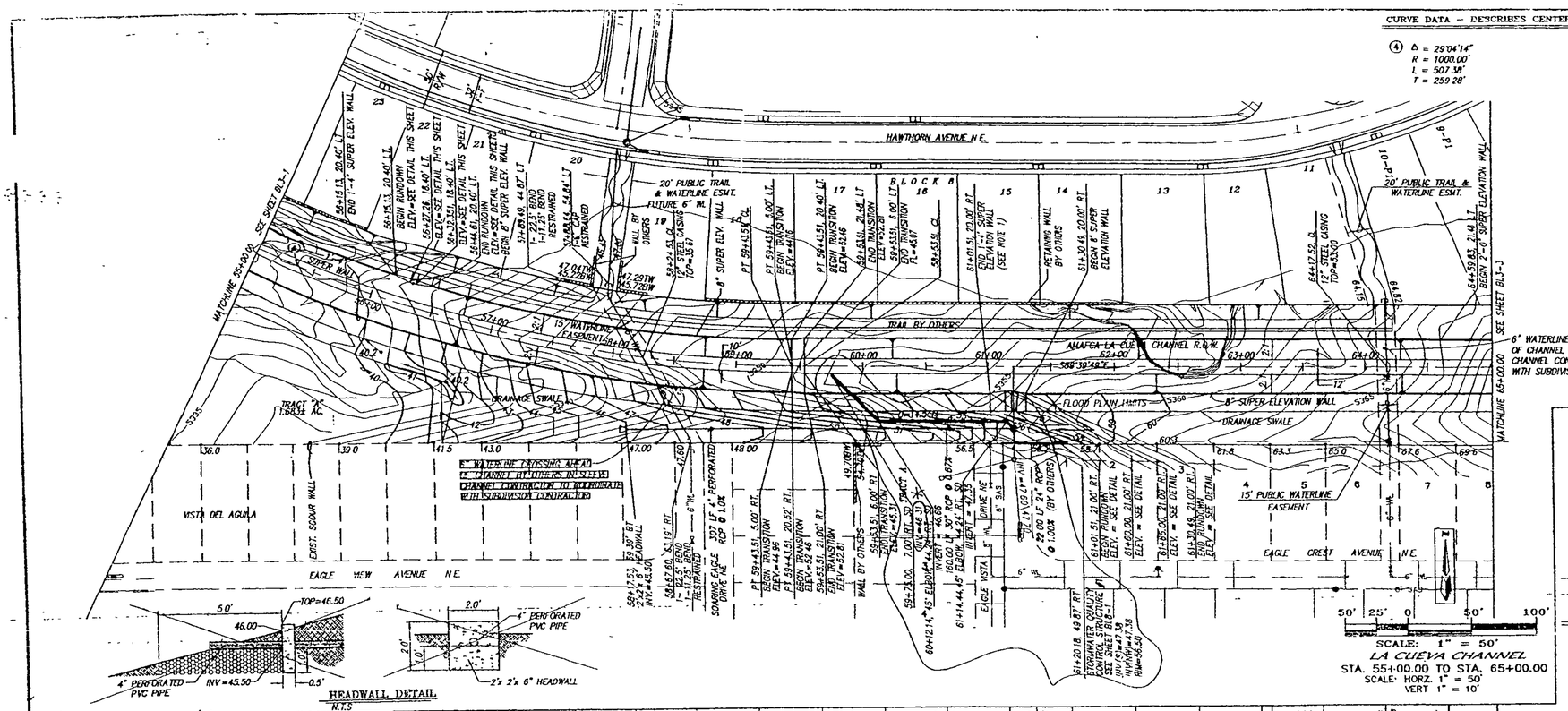


RUNDOWN DETAIL – LEFT SIDE OF CHANNEL
NTS

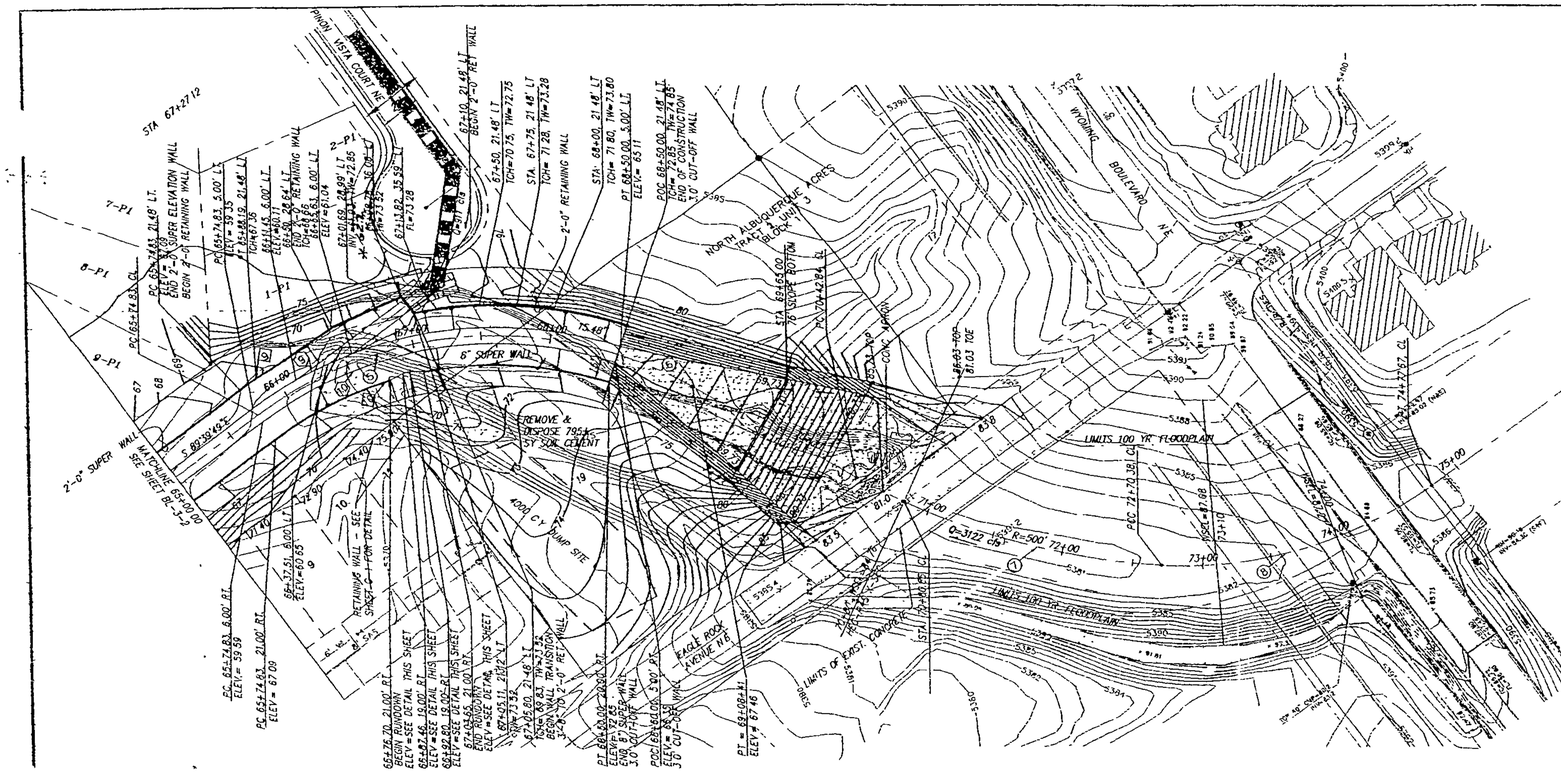


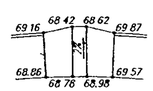
RUNDOWN DETAIL – RIGHT SIDE OF CHANNEL
NTS

HEADWALL DETAIL
N.T.S


HAWTHORN AVENUE N.E.
EAGLE VIEW AVENUE N.E.
EAGLE CREST AVENUE N.E.
VISTA DEL AGUILA
EAGLE VISTA
SORAYDE EAGLE DRIVE N.E.
TRACT "A" 1.6803± AC.
DRAINAGE SWALE
EXIST. SCOUR WALL
20' PUBLIC TRAIL & WATERLINE ESMT.
FUTURE 6" W.L.
15' WATERLINE EASEMENT
TRAIL BY OTHERS
ANAFEA-LA CUEVA CHANNEL R.&W.
S80°39'49"E
FLOOD PLAIN LIMITS
8' SUPER-ELEVATION WALL
15' PUBLIC WATERLINE EASEMENT
6" WATERLINE CROSSING AHEAD OF CHANNEL BY OTHERS IN SLEEVE. CHANNEL CONTRACTOR TO COORDINATE WITH SUBDIVISION CONTRACTOR
WATCHLINE 55+00.00
WATCHLINE 65+00.00
SEE SHEET BL3-1
SEE SHEET BL3-J
BLOCK 6
SUPER WALL
RETAINING WALL BY OTHERS
WALL BY OTHERS
6" WATERLINE CROSSING AHEAD OF CHANNEL BY OTHERS IN SLEEVE. CHANNEL CONTRACTOR TO COORDINATE WITH SUBDIVISION CONTRACTOR
160.00 LF 30" RCP @ 0.67%
INVERT = 47.35
DRIVE NE
8" SAS
6" WL
6" WL
6" WL

RECORD DRAWINGS





RUNDOWN DETAIL
NTS

50' 25' 0 50' 100'

SCALE: 1" = 50'
LA CUEVA CHANNEL
STA. 65+00.00 TO STA. 68+50.00
SCALE: HORZ. 1" = 50'
VERT 1" = 10'

NOTES

1 SEE BLOCK WALL DETAIL ON SHEET G-1

2 PROVIDE HANDRAIL FROM STA. 65+50 TO STA 68+50 PER DETAIL SHOWN ON SHEET G-1

3 SEE SHEET BL7-3 FOR 108" OUTFALL AT STA 67+13.82.

CURVE DATA – DESCRIBES CENTERLINE

④ Δ = 29°04'14" R = 1000.00' L = 507.38' T = 259.28'

⑤ Δ = 54°00'35" R = 291.91' L = 275.17' T = 148.77'

⑥ = 11°27'59" R = 291.91' T = 29.31' L = 58.42'

⑦ = 26°04'27" R = 500.00' L = 227.54' T = 115.77'

⑧ = 39°35'23" R = 300.00' L = 207.29' T = 107.98'

CURVE DATA – DESCRIBES BOTTOM OF CHANNEL

⑦ Δ = 29°04'14" R = 935.00' L = 504.84' T = 257.98'

⑧ Δ = 29°04'14" R = 1005.00' L = 509.91' T = 260.57'

⑨ Δ = 54°00'35" R = 297.91' L = 280.82' T = 151.82'

⑩ = 54°00'35" R = 285.91' L = 269.51' T = 145.71'

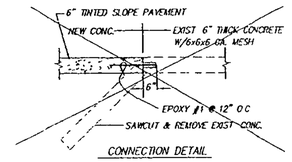
CURVE DATA – DESCRIBES TOP EDGE OF CHANNEL

⑦ Δ = 29°04'14" R = 950.00' L = 497.23' T = 254.09'

⑧ Δ = 29°04'14" R = 1020.00' L = 517.73' T = 264.46'

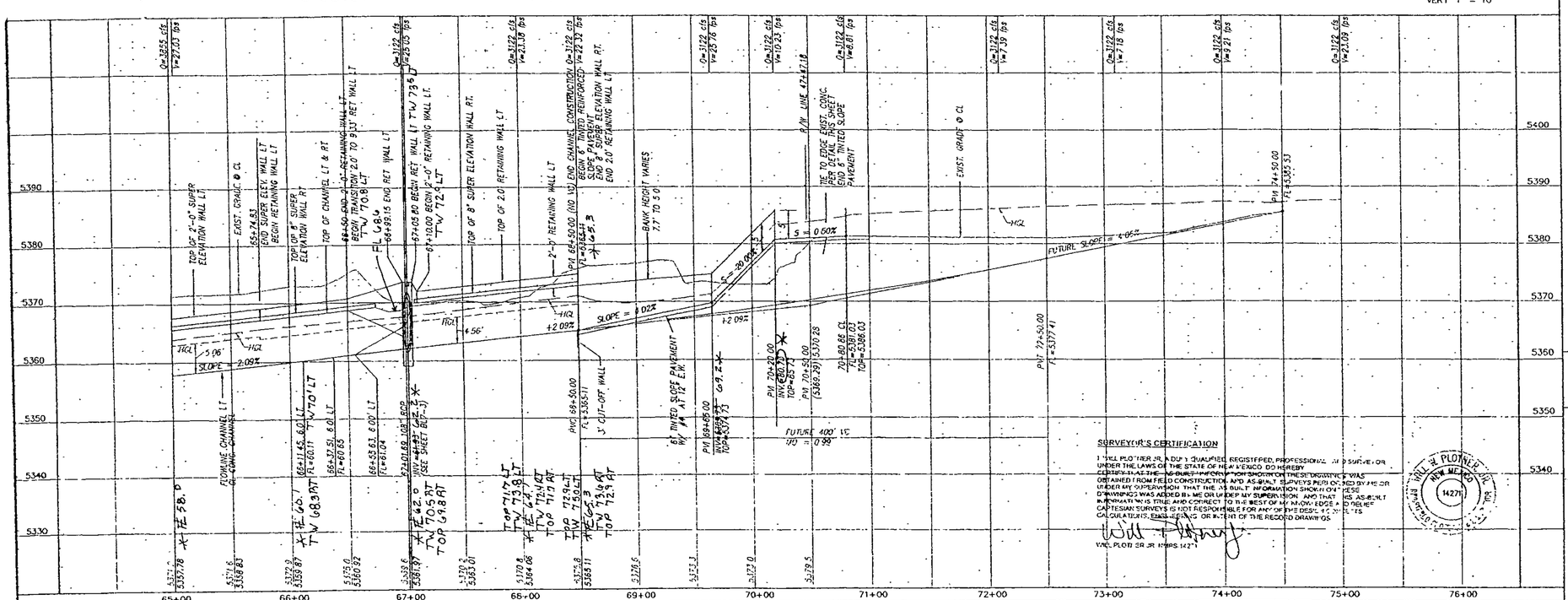
⑨ = 02°37'24" R = 313.39' L = 14.35' T = 7.18'

⑩ = 54°00'35" R = 270.91' L = 255.37' T = 138.06'



CONNECTION DETAIL

Revised Station 68+50 to 70+92 For Additional Information See Sheet BL3-3A



SURVEYOR'S CERTIFICATION

I WILL PLOTTER JR, A DULY QUALIFIED REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO DO HEREBY CERTIFY THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND AS-BUILT SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION AND THAT THIS AS-BUILT INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CALCULATIONS, ENGINEERING ORIENTATION OF THE RECORD DRAWINGS.

WILL PLOTTER JR. NMPS 14271

WILL PLOTTER JR. NEW MEXICO 14271

AS BUILT INFORMATION
CONTRACTOR MARK GOODWIN & ASSOCIATES, P.A. DATE 7/03
SURVEYED BY CARTESIAN SURVEYS, INC. DATE 7/03
INSPECTED BY BHT DATE 7/03
FIELD BOOK CARTESIAN SURVEYS DATE 7/03
VERIFICATION BY CARTESIAN SURVEYS DATE 7/03
MICRO-FILM INFORMATION
RECORDED BY MARK GOODWIN & ASSOC. DATE
NO

BENCH MARKS
"I-B20", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE, TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR. GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST.; THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE.; THE STA IS LOCATED IN THE N.E. QUADRANT. STATION MARK IS A STANDARD AGS BRASS TABLET, STAMPED "I-B20". X = 410,237.56, Y = 1,534,082.46, C-G = .99984740
DELTA ALPHA = 0°02'31", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510' (SEA LEVEL 1929)

SURVEY INFORMATION
FIELD NOTES
NO BY DATE

ENGINEER'S SEAL
D. MARK GOODWIN NEW MEXICO 6844 REGISTERED PROFESSIONAL ENGINEER
7/12/02

NO	DATE	REMARKS / REVISIONS	BY
		DESIGN	
		DESIGNED BY	GJK
		DRAWN BY	RDQ
		CHECKED BY	DMG

DESIGN REVIEW COMMITTEE
PP
SEP 12 2002
RIVER ENGINEERING
SEP 12 2002
CITY ENGINEER

LAST DESIGN UPDATE

NO. DATE/YR. BY

mg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

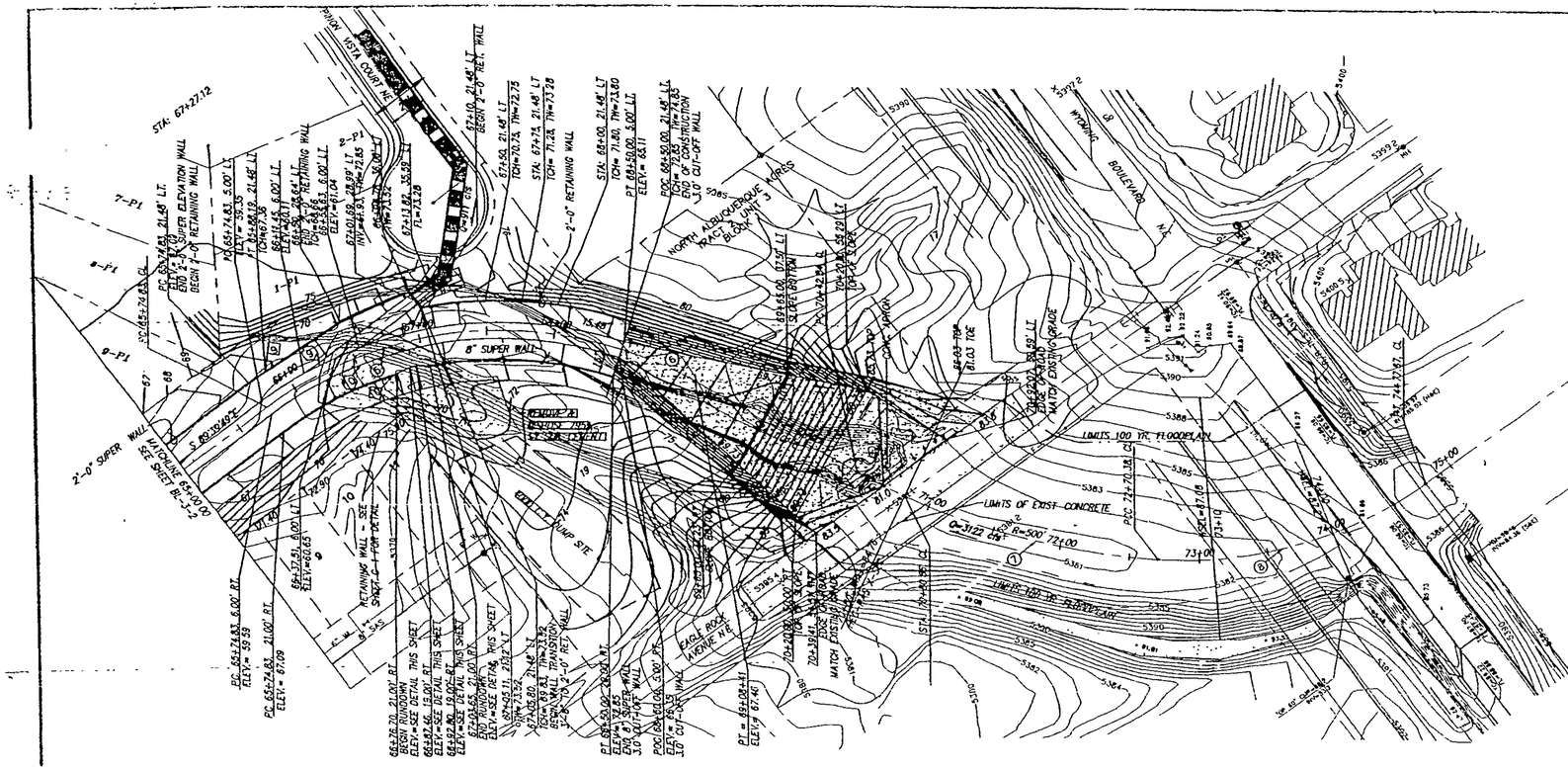
BID LOT 3
LA CUEVA ARROYO REACH 3

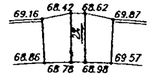
CHANNEL PLAN & PROFILE
STA 65+00 TO 68+50

CITY PROJECT NO. 677181
ZONE MAP NO. C-19-Z
SHEET BL3-3

A0129WP/CHANNEL/BL3-3AB.DWG/04-12-02/ KJS MJR NHM ACH RDQ

RECORD DRAWINGS





RUNDOWN DETAIL
NTS

NOTES

1. SEE BLOCK WALL DETAIL ON SHEET G-1
2. PROVIDE HANDRAIL FROM STA. 65+50 TO STA. 68+50 PER DETAIL SHOWN ON SHEET G-1
3. SEE SHEET BL7-3 FOR 108" OUTFALL AT STA. 67+13.82

CURVE DATA – DESCRIBES CENTERLINE

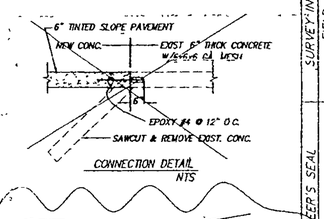
④	Δ = 29°04'14"	
	R = 1000.00'	
	L = 507.38'	
	T = 259.28'	
⑤	Δ = 54°00'35"	
	R = 291.91'	
	L = 275.17'	
	T = 148.77'	
⑥	= 11°27'59"	
	R = 291.91'	
	T = 29.31'	
	L = 58.42'	
⑦	= 26°04'27"	
	R = 500.00'	
	L = 227.54'	
	T = 115.77'	
⑧	= 39°35'23"	
	R = 300.00'	
	L = 207.29'	
	T = 107.98'	

CURVE DATA – DESCRIBES BOTTOM OF CHANNEL

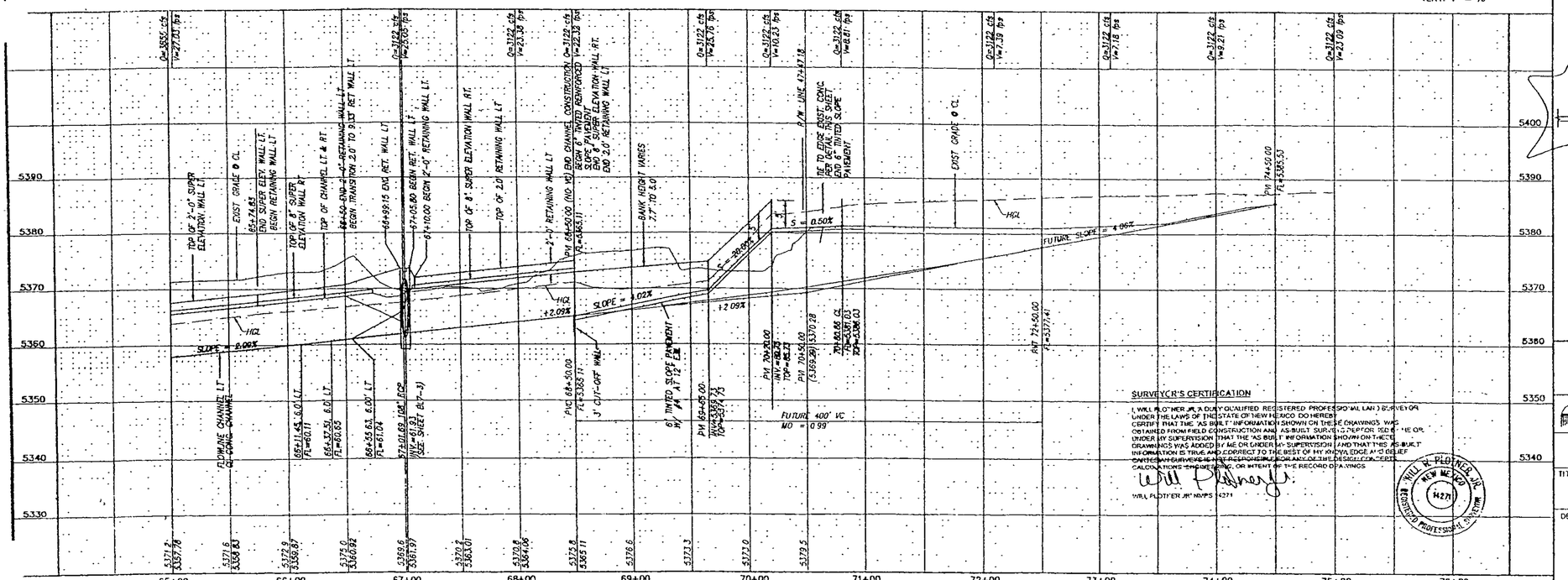
⑦	Δ = 29°04'14"	⑧ Δ = 29°04'14"	⑨ Δ = 54°00'35"
	R = 935.00'	R = 1005.00'	R = 297.91'
	L = 504.84'	L = 509.91'	L = 280.82'
	T = 257.98'	T = 260.57'	T = 151.82'
⑩	= 54°00'35"		
	R = 285.91'		
	L = 269.51'		
	T = 145.71'		

CURVE DATA – DESCRIBES TOP EDGE OF CHANNEL

⑦	Δ = 29°04'14"	⑧ Δ = 29°04'14"	⑨ = 02°37'24"
	R = 980.00'	R = 1020.00'	R = 313.39'
	L = 497.23'	L = 517.73'	L = 14.35'
	T = 254.09'	T = 264.46'	T = 7.18'
⑩	= 54°00'35"		
	R = 270.91'		
	L = 255.37'		
	T = 138.06'		



SEE BL3-3 FOR Asbuilt info.



SURVEYOR'S CERTIFICATION

I, WILL PLOTTER JR., A DULY QUALIFIED REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO DO HEREBY CERTIFY THAT THE "AS BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND AS-BUILT SURVEYS PERFORMED UNDER MY SUPERVISION THAT THE "AS BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION AND THAT THIS "AS BUILT" INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT SAID SURVEYS IS NOT RESPONSIBLE FOR ACCURACY OF DESIGN OR CERTIFICATIONS OF ENGINEERING OR INTENT OF THE RECORD DRAWINGS

Will Plotter

WILL PLOTTER JR. NMPS 4271

WILL N. PLOTTER JR. NEW MEXICO 4271 REGISTERED PROFESSIONAL SURVEYOR

AS BUILT INFORMATION

CONTRACTOR: PAVE + CHART CONTRACTORS DATE 7/03
SURVEYED BY: JAMES JENKINS DATE 1/03
INSPECTOR'S FIELD NOTES BY: BHT DATE 1/03
GRADING & DRAINAGE AS-BUILT BY: CARLSBAD DATE 7/03
SURVEYING AS-BUILT BY: SOUTHWEST SURV. DATE 7/03
CORRECTED BY: SOUTHWEST SURV. DATE 7/03
MICRO-FILM INFORMATION
RECORDED BY: DATE
NO

BENCH MARKS

1'-120", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT STATION MARK IS A STANDARD AGS BRASS TABLET, STAMPED 1'-120", X = 410,237.56, Y = 1,324,092.46, G-G = .99968748 DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927) ELEVATION = 5474.510' (SLD 1929)

SURVEY INFORMATION

FIELD NOTES

NO	DATE	BY

ENGINEER'S SEAL

NO	DATE	REMARKS / REVISIONS / DESIGN	BY
1	10/02/02	STATIONED SLOPE PAVEMENT, ADDED SECTION	GJK

DESIGNED BY GJK DATE 9/01
DRAWN BY RDQ DATE 9/01
CHECKED BY DMG DATE 9/01

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

BID LOT 3
LA CUEVA ARROYO REACH 3

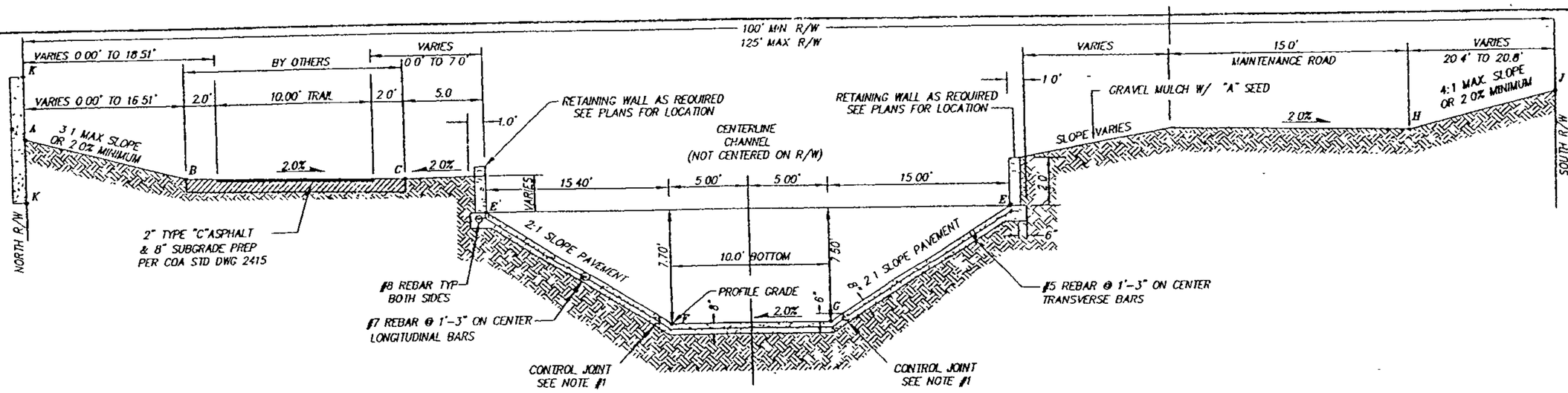
TITLE
CHANNEL PLAN & PROFILE
STA 65+00 TO 68+50

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO/DAY/YR	MO/DAY/YR

CITY PROJECT NO. 677181
ZONE MAP NO C-19-Z
SHEET BL3-3A

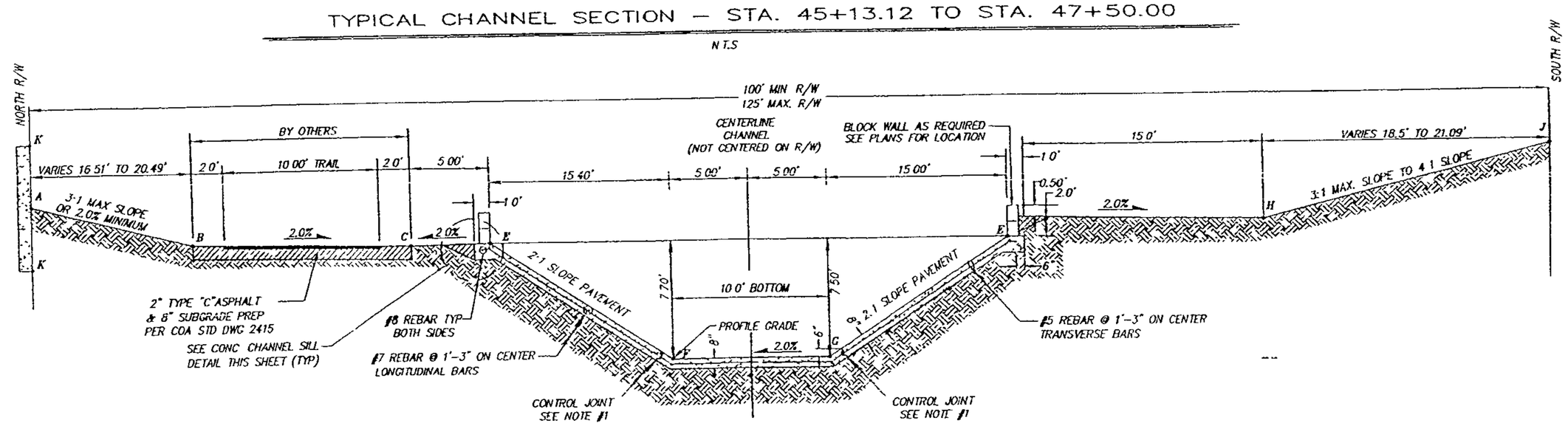
A0129WP/CHANNEL/BL3-3AB.DWG/10-02-02/ KJS MJR NHM ACH RDQ GJK

RECORD DRAWINGS



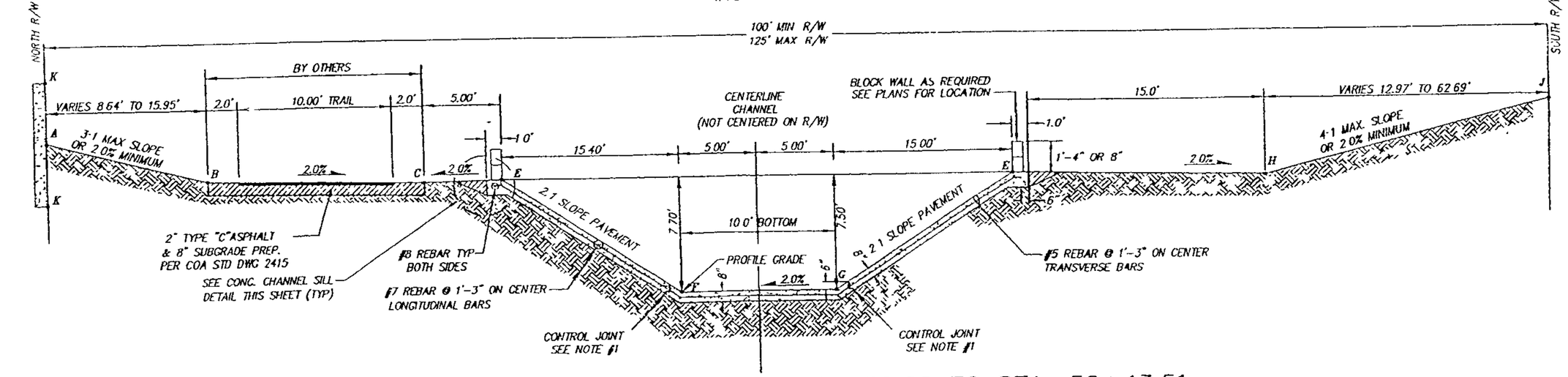
TYPICAL CHANNEL SECTION — STA. 45+13.12 TO STA. 47+50.00

N.T.S



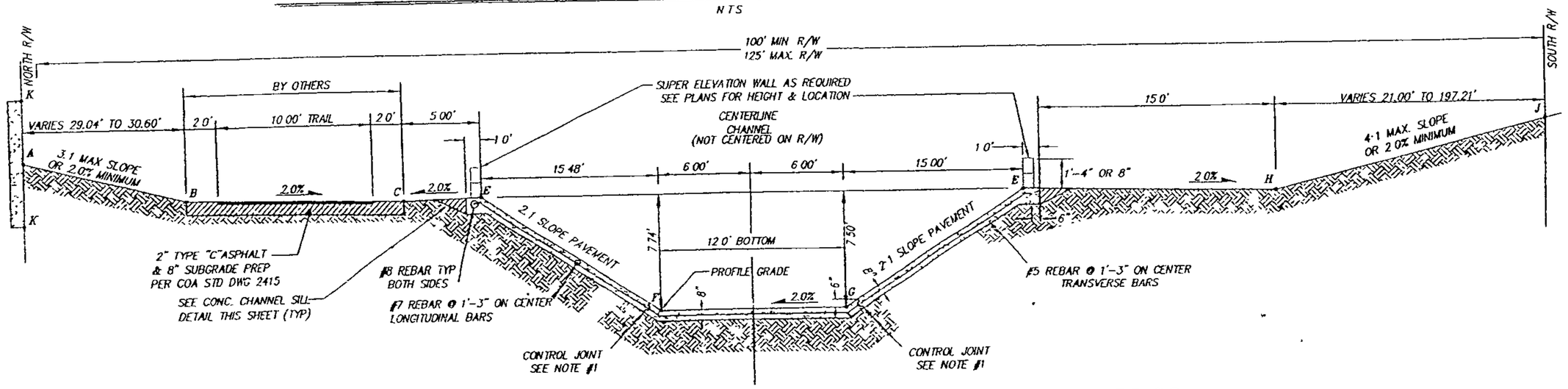
TYPICAL CHANNEL SECTION — STA. 47+50.00 TO STA. 50+50.00

N.T.S



TYPICAL CHANNEL SECTION — STA. 50+50.00 TO STA. 59+43.51

N.T.S



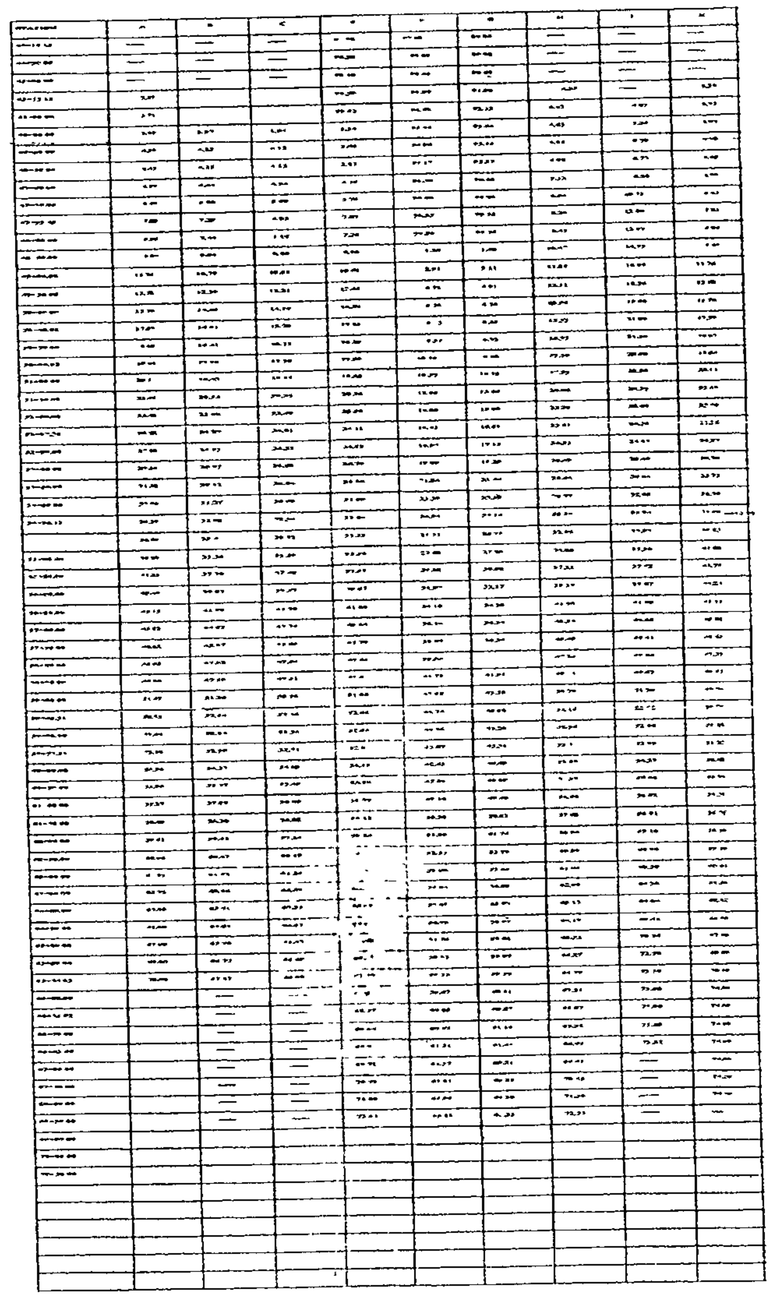
TYPICAL CHANNEL SECTION — STA. 59+53.51 TO STA. 68+50.00

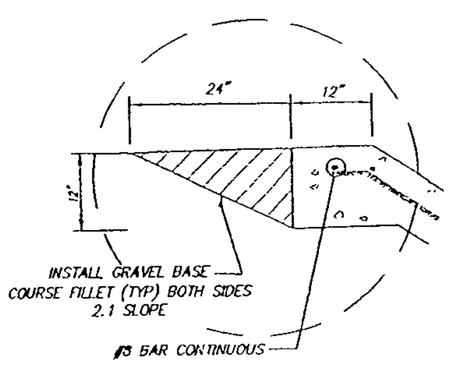
N.T.S

NOTES

1. SAW CUT CONTROL JOINT 1/4" WIDE, 2" DEEP AND APPLY POLYURETHANE SEALANT OR USE COLD KEY JOINT OR ENGINEER APPROVED EQUAL. (CONTRACTOR'S OPTION) TYPICAL BOTH SIDES
2. CONCRETE SLOPE PAVING SHALL BE FINISHED WITH A DOUBLE TINE FINISH, I.E., BRIDGE TINE FINISH WITH TWO PASSES TRANSVERSE TO FLOW

CROSS SECTION ELEVATIONS





CONC. CHANNEL SILL DETAIL

N.T.S

NOTE

1. ALL CHANNEL SURFACES SHALL HAVE BRIDGE FLOAT FINISH, DOUBLED TINED
2. ALL CHANNEL CONCRETE SHALL BE TINTED SAN DIEGO BUFF 1 LB PER SACK OF CEMENT
3. GRAVEL BASE COURSE FILLET IS INCIDENTAL TO COST OF CHANNEL LINING

A00129WP\CHANNEL\X-SEC-TEMPLATEA-1\03-13-02\ MJR RDO NHM

AS BUILT INFORMATION
CONTRACTOR MARK V. CHANT CONTRACTING DATE 3/03
WORK STARTED 3-24-03 BY BHT
INSPECTION PERFORMED BY CARRILLO DATE 1/03
FIELD TESTING BY CARRILLO DATE 1/03
VERTICAL & HORIZONTAL CONTROL ESTABLISHED BY ARAGON DATE 7/03
CORRECTED AS-BUILT INFORMATION AHCTO-FILM INFORMATION DATE
RECORDED BY
NO

BENCH MARKS
1"-B20". THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED 1"-B20". X = 410,237.56, Y = 1,524,092.46, C-G = 9996740 DELTA ALPHA = 0°10'23" CENTRAL ZONE, (NAD 1927) ELEVATION = 5474.510' (SEA LEVEL 1929)

SURVEY INFORMATION
FIELD NOTES
NO BY DATE

ENGINEER'S SEAL
NEW MEXICO 14729 REGISTERED PROFESSIONAL ENGINEER JAMES E. APODACA 3-17-04

NO	DATE	REMARKS	BY
	09/01	DESIGN	GMC
	09/01	REVISIONS	MJR
	09/01		DMG

DESIGNED BY GMC
DRAWN BY MJR
CHECKED BY DMG

dmg MARK GOODWIN & ASSOCIATES P.A
CONSULTING ENGINEERS
P.O BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN
ARROYO FLOOD CONTROL AUTHORITY

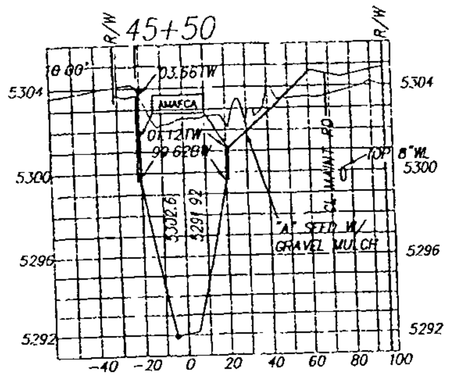
BID LOT 3
LA CUEVA ARROYO REACH 3

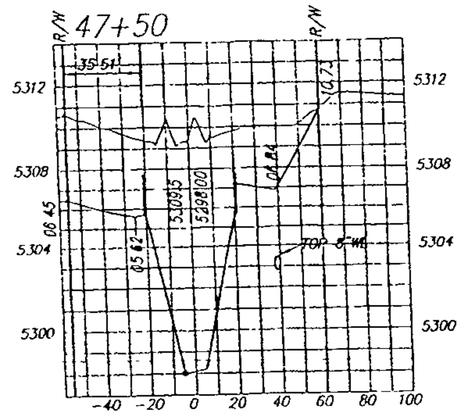
TITLE
LA CUEVA CHANNEL
CROSS SECTION TEMPLATES & ELEVATIONS

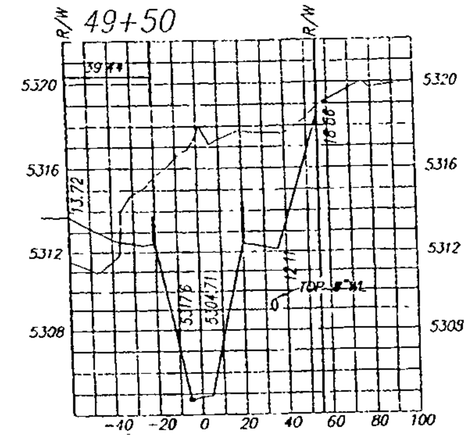
DESIGN REVIEW COMMITTEE | CITY ENGINEER APPROVAL | LAST DESIGN UPDATE | MO/DAY/YR

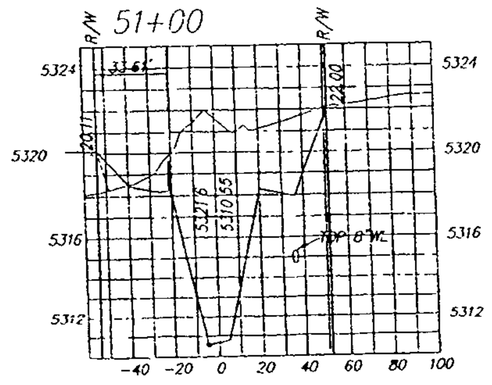
CITY PROJECT NO 677181
ZONE MAP NO C-19-Z
SHEET BL3-4

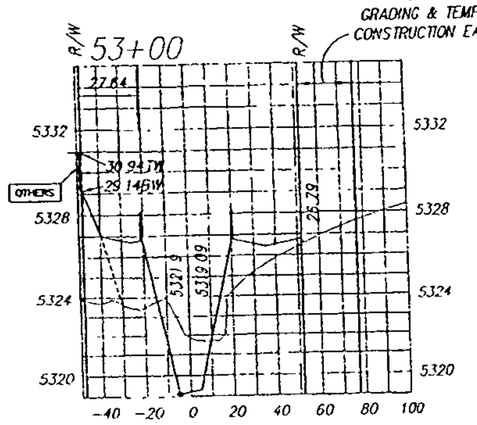
RECORD DRAWINGS

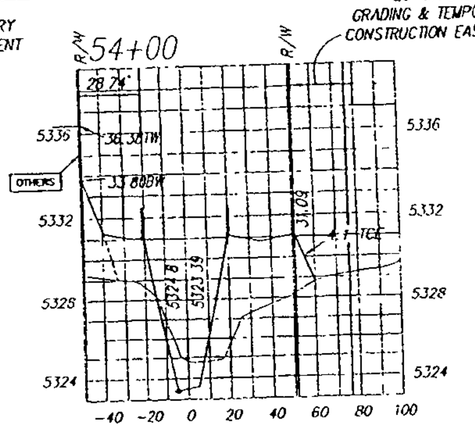


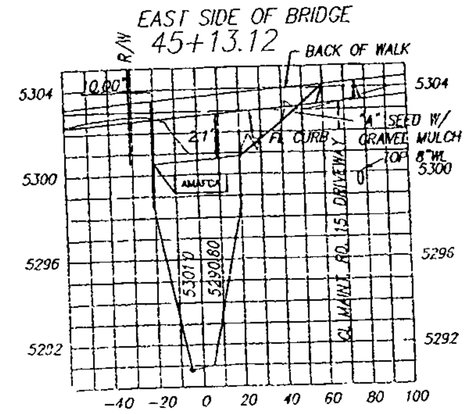


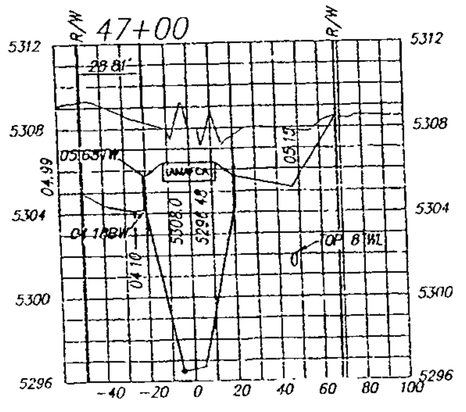


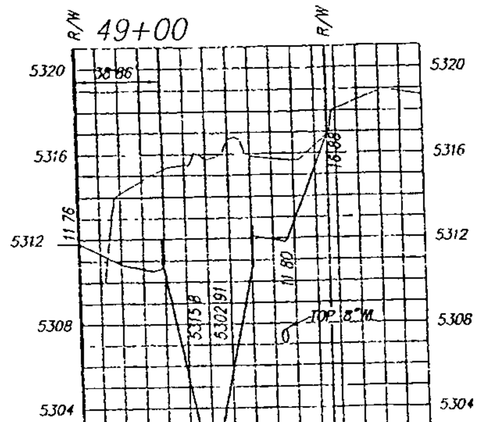


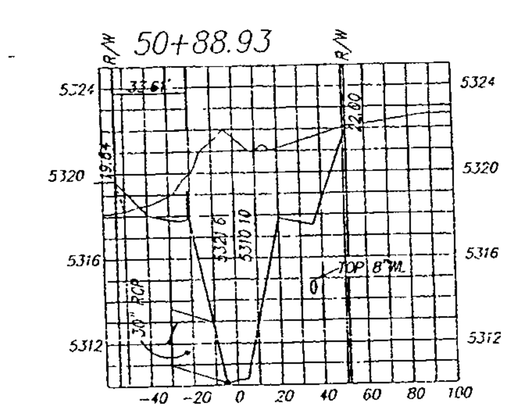


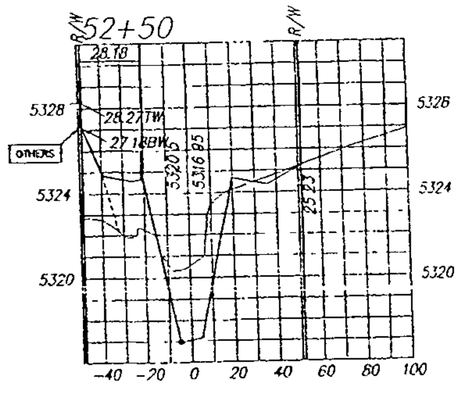


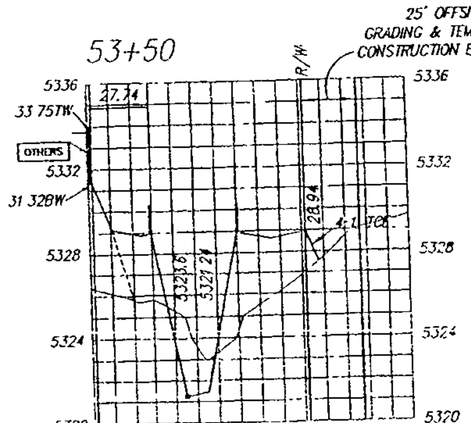


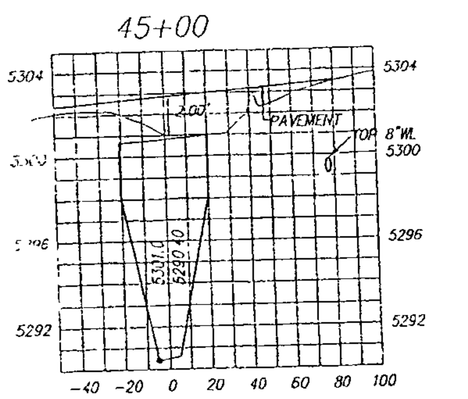


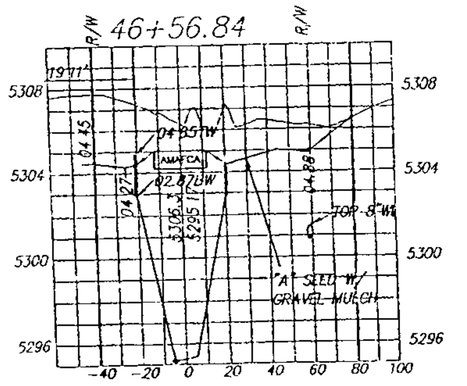


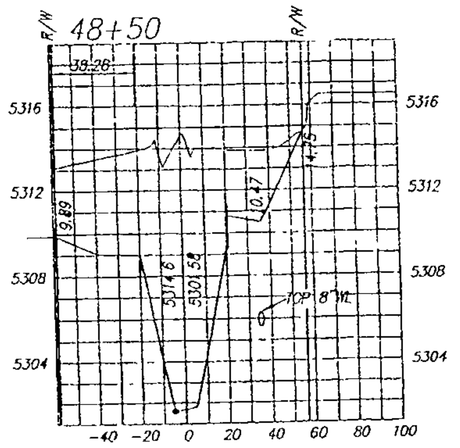


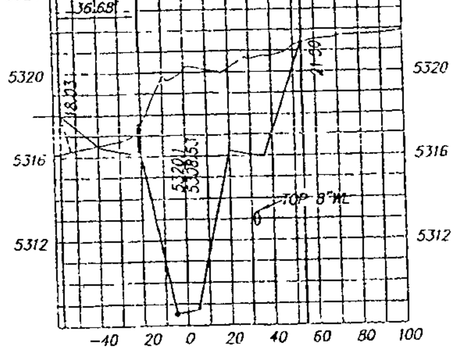


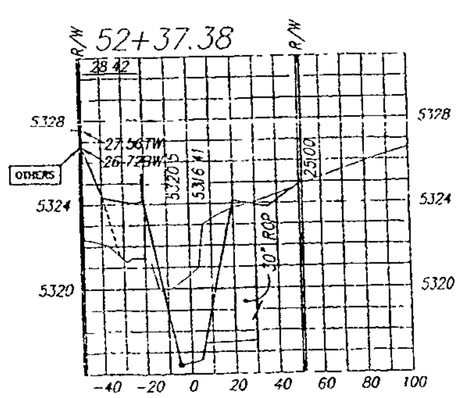


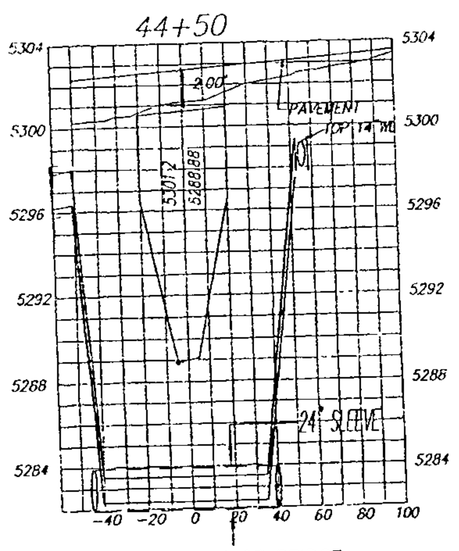


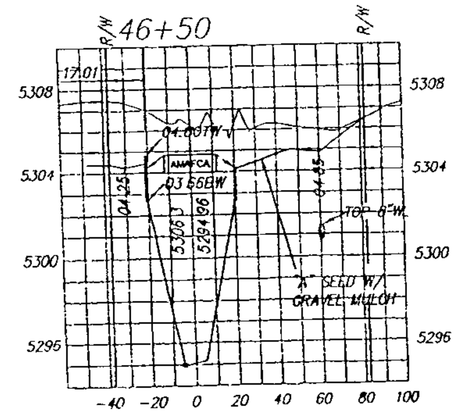


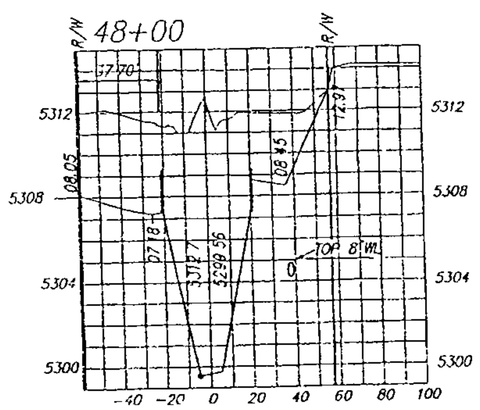


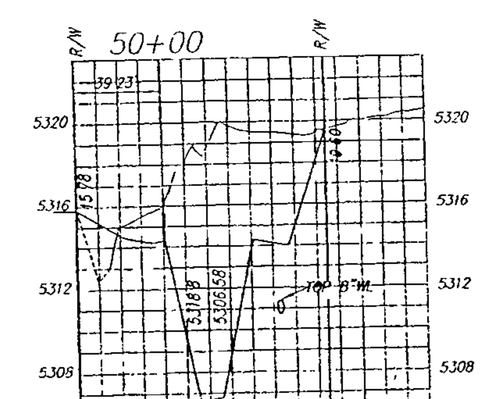


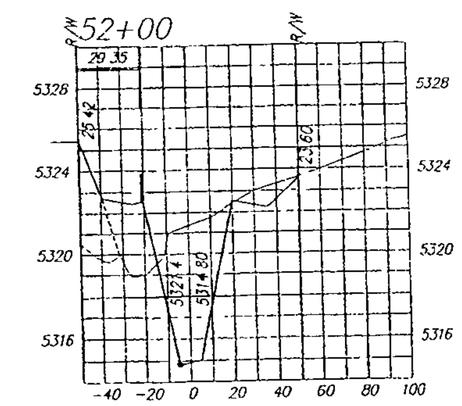


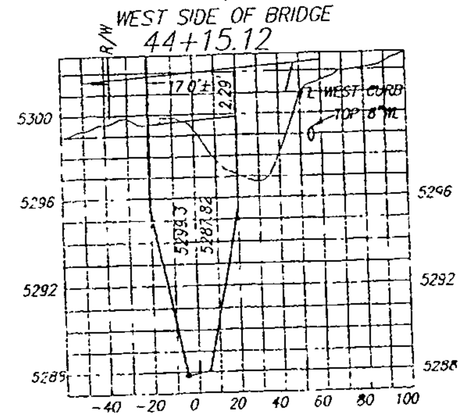


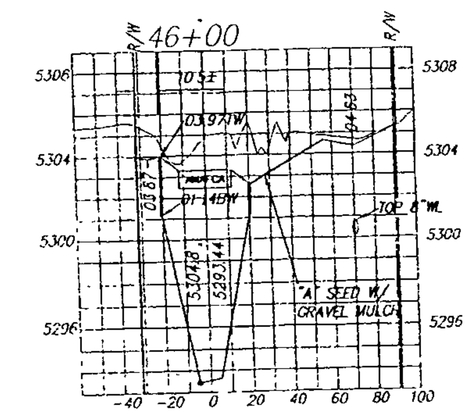


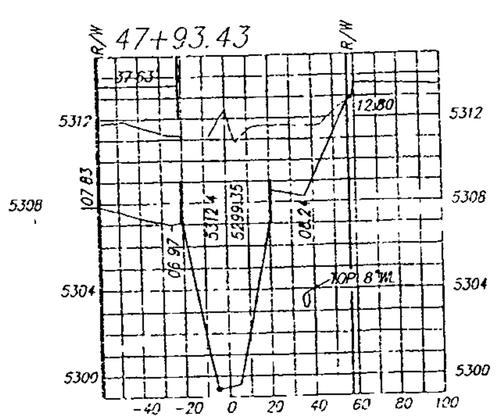


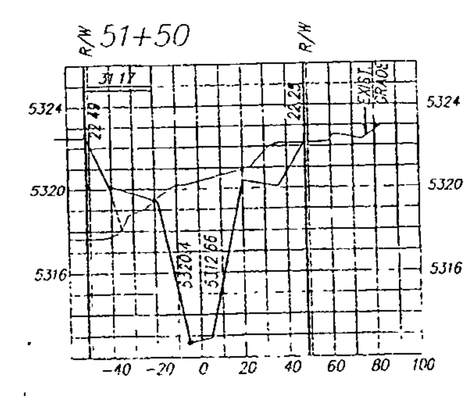












NOTES

1 DESERT RIDGE TRAILS SUBDIVISION GRADES (NORTH R/W LINE) WILL BE WHAT THE PROPOSED CHANNEL GRADES TIE TO

GEND

- AMAFCA — WALL BY AMAFCA
- OTHERS — WALL BY OTHERS
- GRADE TO EXISTING (IF SUBDIVISION DEVELOP BEFORE CHANNEL)
- FUTURE GRADE
- TW — TOP OF WALL
- BW — BOTTOM OF WALL
- PROPOSED GRADE
- EXISTING GRADE

SCALE. HORZ 1" = 50'
VERT. 1" = 5'

AS BUILT INFORMATION
CONTRACTOR MARK E. CLARK CONTRACTORS DATE 7/03
WORK STAKED BY CARTESIAN SURVEYS, INC. DATE 7/03
FIELD INSPECTION BY CARTESIAN SURVEYS, INC. DATE 7/03
DRAWINGS BASED ON FIELD SURVEY BY CARTESIAN SURVEYS, INC. DATE 7/03
MICRO-FILM INFORMATION
DATE
RECORDED BY
NO

BENCH MARKS
"1-B20", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E QUADRANT STATION MARK IS A STANDARD ACE BRASS TABLET, STAMPED "1-B20", X = 410,237.58, Y = 1,524,092.46, Z-G = 5886.440
DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510 (SLD 1929)

SURVEY INFORMATION
FIELD NOTES
NO | BY | DATE

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER 13121 STATE OF NEW MEXICO 3-28-02

NO.	DATE	REVISIONS	DESIGNED BY	DRAWN BY	CHECKED BY
		DESIGN	GJC	RDQ	DMG
		DATE	09/01	09/01	09/01

dmg MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY
BID LOT 3
LA CUEVA ARROYO REACH 3

TITLE:
CROSS SECTIONS

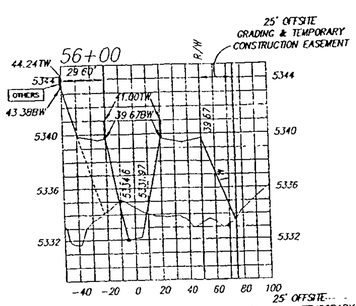
CITY ENGINEER APPROVAL	DATE	CITY ENGINEER APPROVAL	DATE
SEP 12 2002		SEP 12 2002	
REVISED PER METRO		CITY ENGINEER	

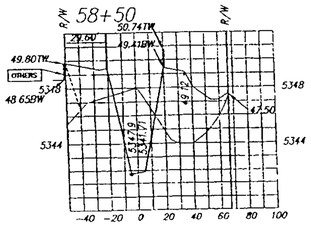
LAST DESIGN UPDATE

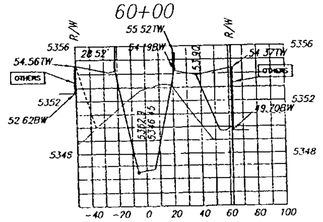
CITY PROJECT NO 677181 | ZONE MAP NO C-19-Z | SHEET BL3-5

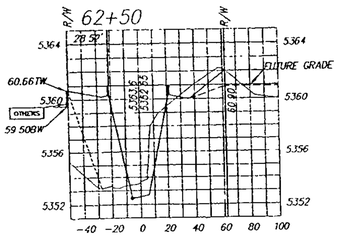
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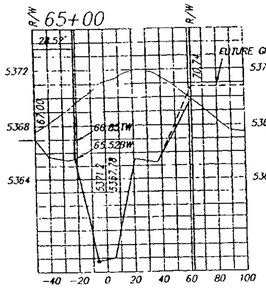
RECORD DRAWINGS

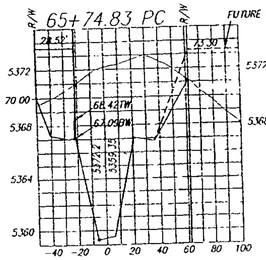


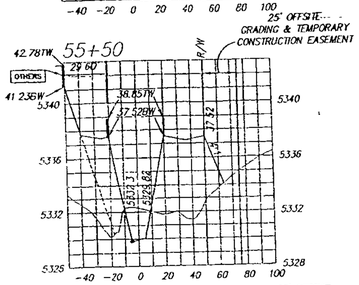


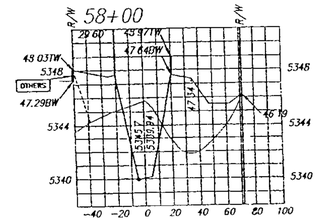


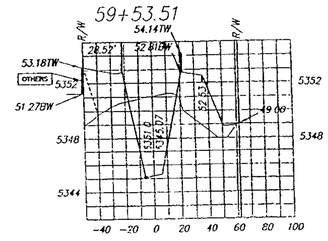


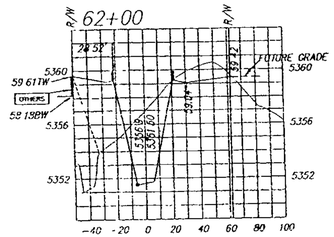


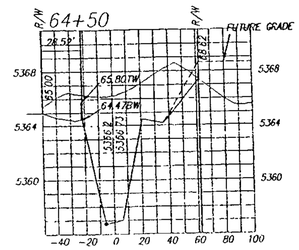


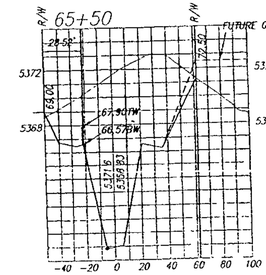


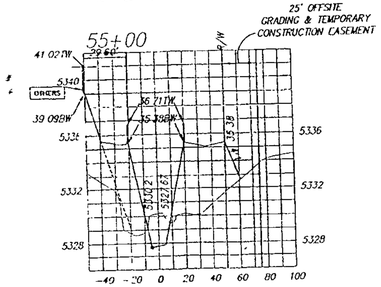


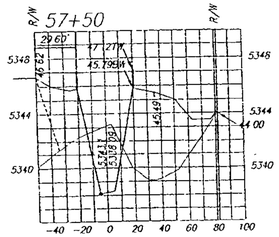


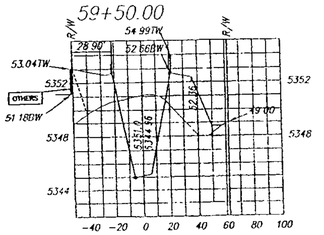


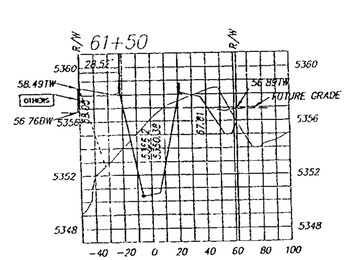


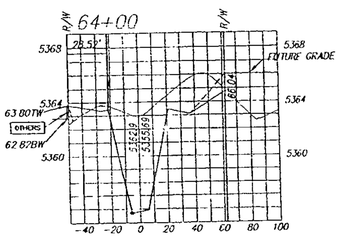


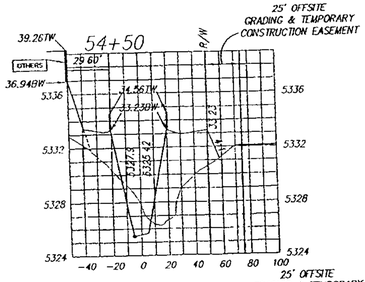


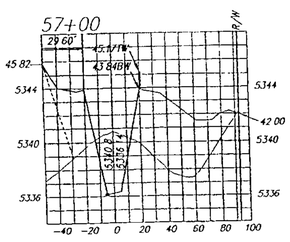


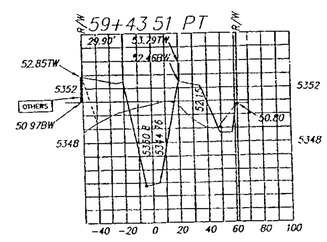


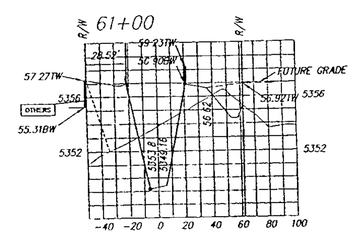


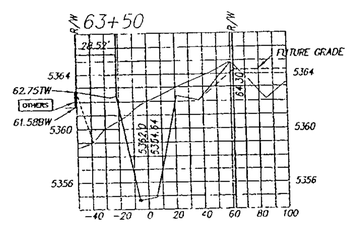


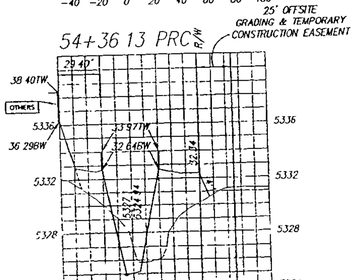


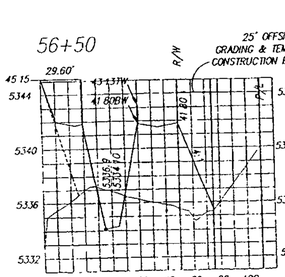


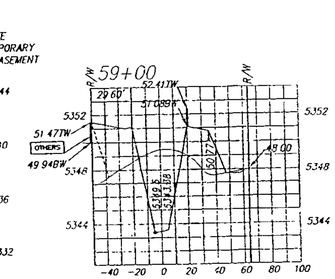


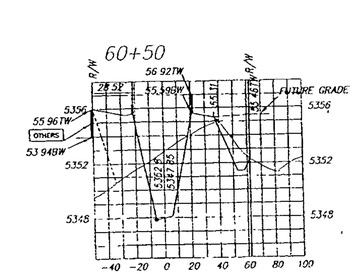


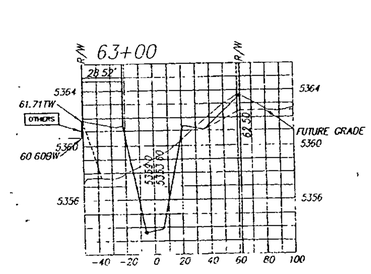












NOTES

1 DESERT RIDGE TRAILS SUBDIVISION GRADES (NORTH R/W LINE) WILL BE WHAT THE PROPOSED CHANNEL GRADES TIE TO

LEGEND

- AMAFCA — WALL BY AMAFCA
- OTHERS — WALL BY OTHERS
- ---------- GRADE TO EXISTING (IF SUBDIVISION DEVELOP BEFORE CHANNEL)
- - - - - - FUTURE GRADE
- TW — TOP OF WALL
- BW — BOTTOM OF WALL
- ———— PROPOSED GRADE
- ———— EXISTING GRADE

SCALE: HORZ. 1" = 50'
VERT 1" = 5'

SURVEY INFORMATION
FIELD NOTES

NO.	DATE	BY

AS BUILT INFORMATION

BENCH MARKS:
"I-B20", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE, TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE., THE STA IS LOCATED IN THE N.E. QUADRANT
STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED
"I-B20", X = 410,237.58, Y = 1,524,082.46, G-G = .99964740
DELTA ALPHA = 010°23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510 (OLD 1929)

CONTRACTOR: PAVER & CONCRETE CONTRACTING — DATE 7-03
SURVEYED BY: C. MANUEL, ZAEL — DATE 7-03
INSPECTION BY: BMT — DATE 7/03
FIELD CERTIFICATION: [illegible] — DATE 7/03
CORRECTIONS BY: [illegible] — DATE 7/03
MICRO-FILM INFORMATION
RECORDED BY
NO — DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	
	09/03	DESIGN	GJK
	09/03	DRAWN BY	RDQ
	09/03	CHECKED BY	DMG

dmg
MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

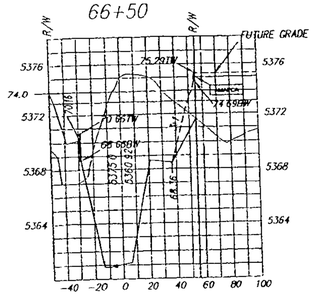
BID LOT 3
LA CUEVA ARROYO REACH 3

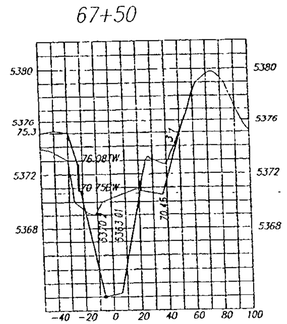
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CROSS SECTIONS

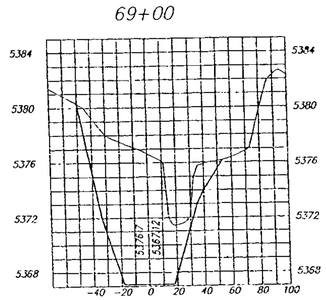
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CITY ENGINEER APPROVAL — DATE
PROJECT ENGINEER — DATE
LAST DESIGN UPDATE

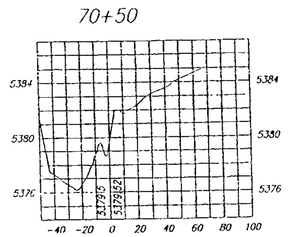
CITY PROJECT NO 677181
ZONE MAP NO C-19-Z
SHEET BL3-6

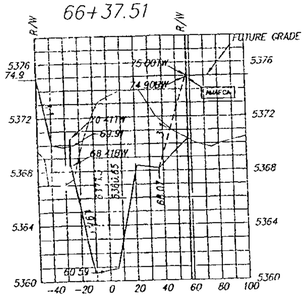
A00129WP/CHANNEL/XSEC2.DWG/04-08-02/ NHM DER MJR RDQ

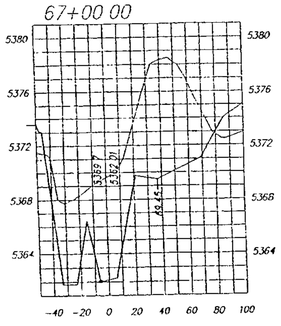


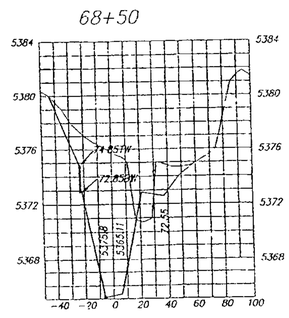


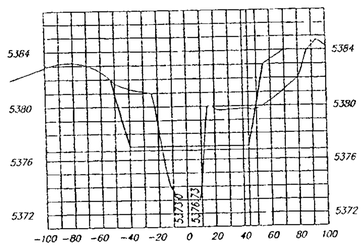


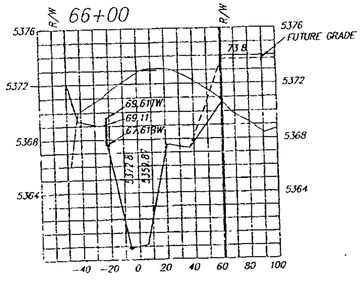


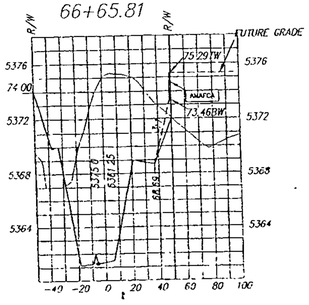


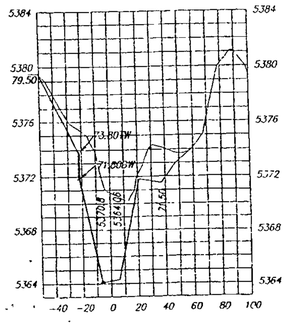


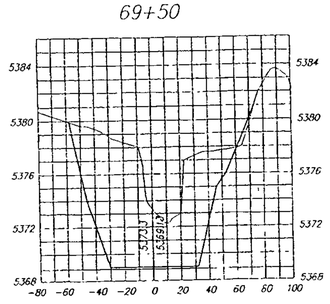












NOTES

1 DESERT RIDGE TRAILS SUBDIVISION GRADES (NORTH R/W LINE) WILL BE WHAT THE PROPOSED CHANNEL GRADES TIE TO

LEGEND

AMAFCA	WALL BY AMAFCA
OTHERS	WALL BY OTHERS
----------	GRADE TO EXISTING (IF SUBDIVISION DEVELOP BEFORE CHANNEL)
- - - - - -	FUTURE GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL
———	PROPOSED GRADE
———	EXISTING GRADE

SCALE. HORIZ. 1" = 50'
VERT 1" = 5'

AS BUILT INFORMATION
CONTRACTOR MARK'S CONST. COMPANY DATE 7/01
WORK STAKED BY CARTER DATE 7/01
INSPECTED BY BHE DATE 7/03
FIELD VERIFICATION BY CARTER DATE 7/03
DRAWINGS CORRECTED BY MARK'S CONST. DATE 7/03
AS-BUILT - FILM INFORMATION

BENCH MARKS
1-B20', THE STATION IS LOCATED 9 MILES N.E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA IS LOCATED IN THE N.E. QUADRANT STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "1-B20", X = 410,237.36, Y = 1,524,082.46, 0-0 = 3956470
DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5374.510' (SLD 1929)

SURVEY INFORMATION
FIELD NOTES

NO	DATE	BY

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER STATE OF NEW MEXICO

NO	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
	09/01	DESIGNED BY GK	
	09/01	DRAWN BY ROQ	
	09/02	CHECKED BY DMG	

dmg MARY GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O BOX 90606
ALBUQUERQUE NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

BID LOT 3
LA CUEVA ARROYO REACH 3

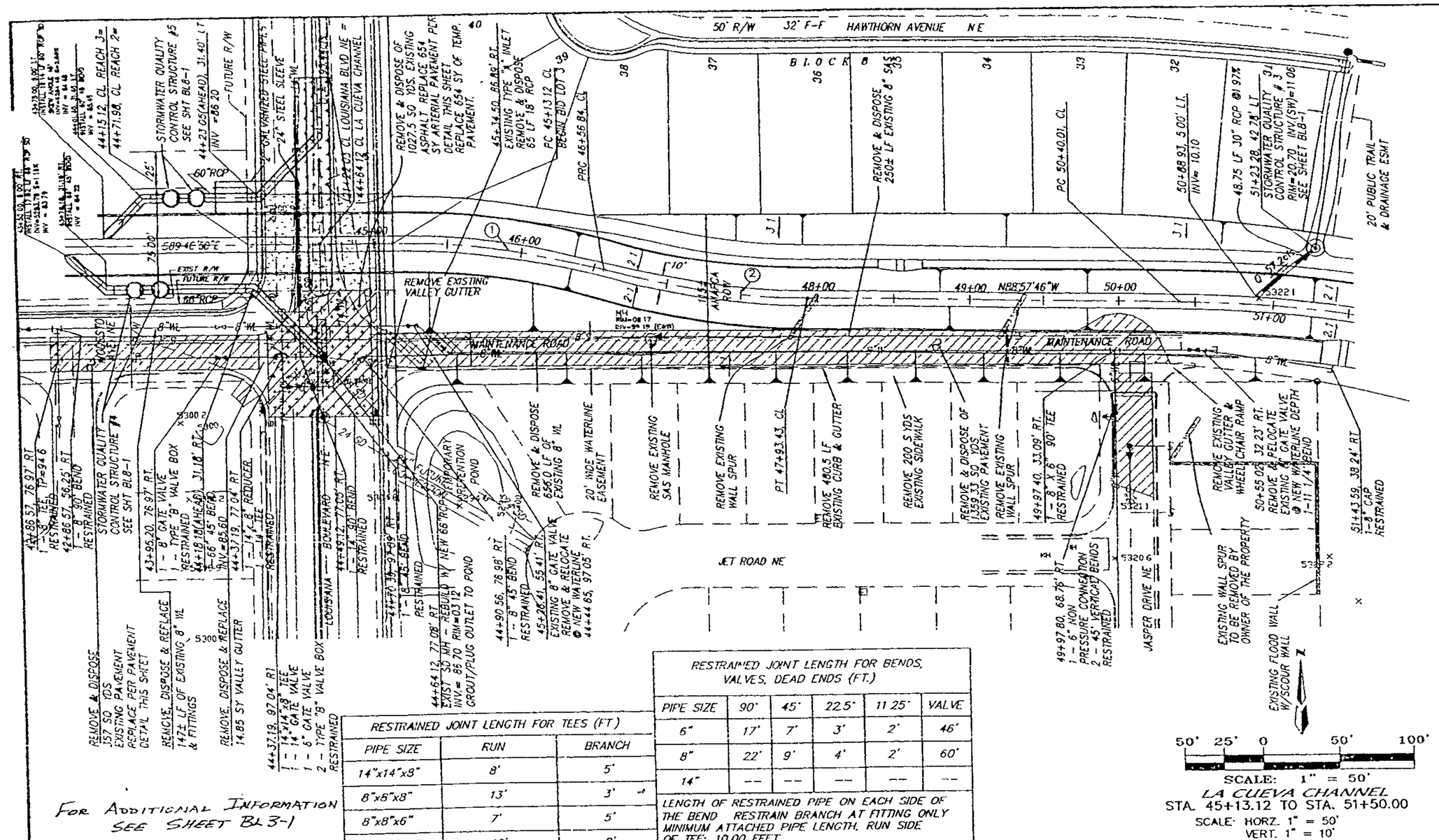
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CROSS SECTIONS

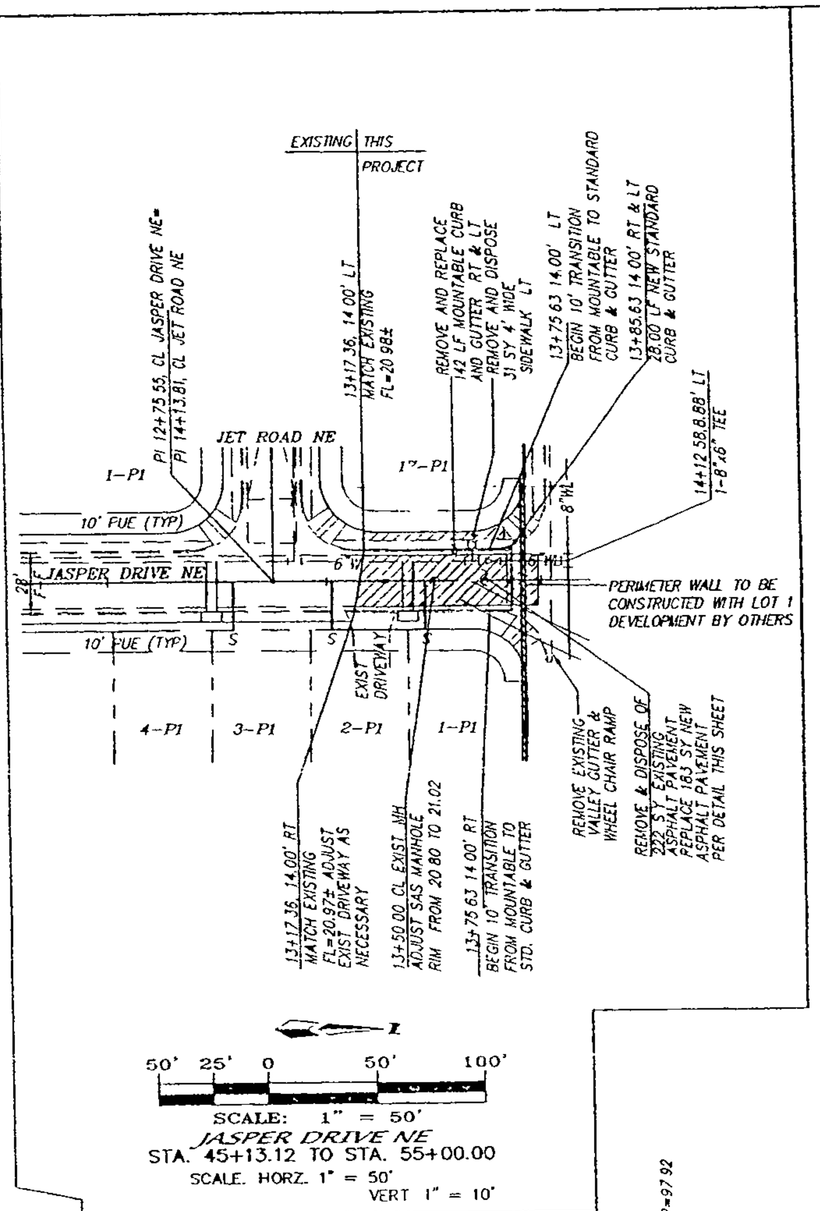
DRAINAGE REVIEW COMMITTEE — SEP 12 2002 — DRAINAGE REVIEW COMMITTEE
CITY ENGINEER APPROVAL — SEP 12 2002 — CITY ENGINEER
LAST DESIGN UPDATE — W.O. DATE — NO. LEAF/YR

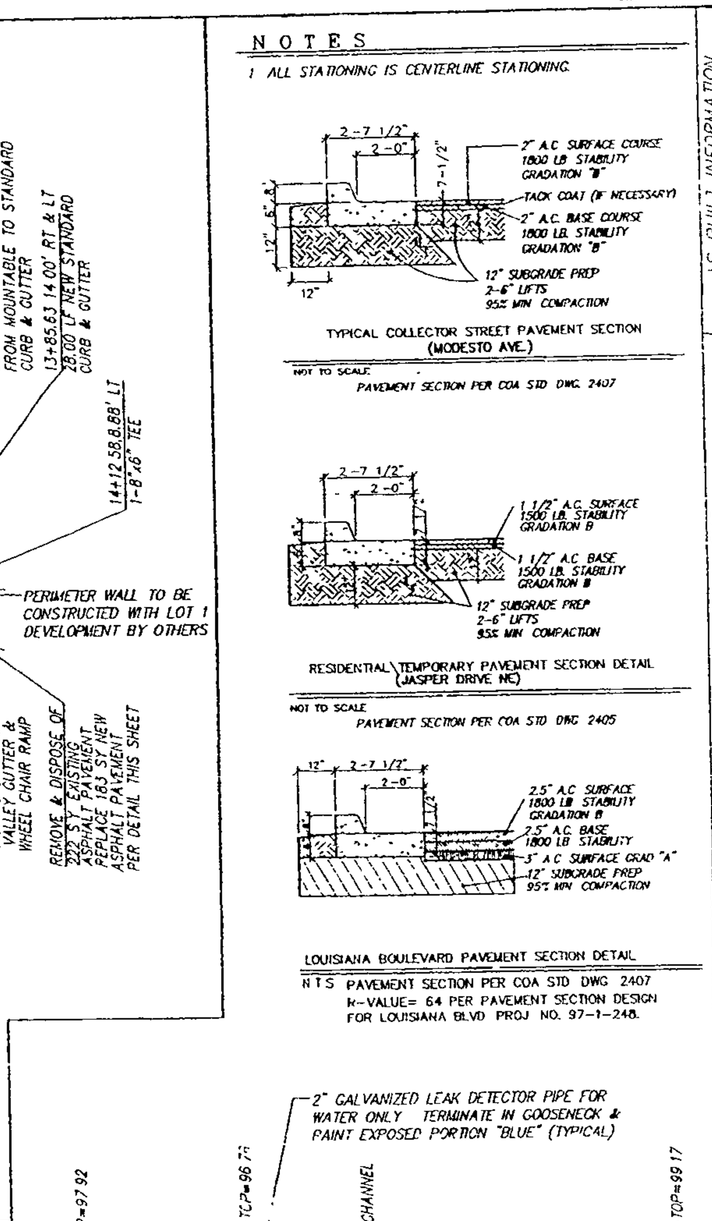
CITY PROJECT NO 677181
ZONE MAP NO C-19-Z
SHEET BL3-7

A:\0129WP\CHANNEL\ASEC3.DWG\ 01-14-02 ROQ MHM MJR

RECORD DRAWINGS







NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.

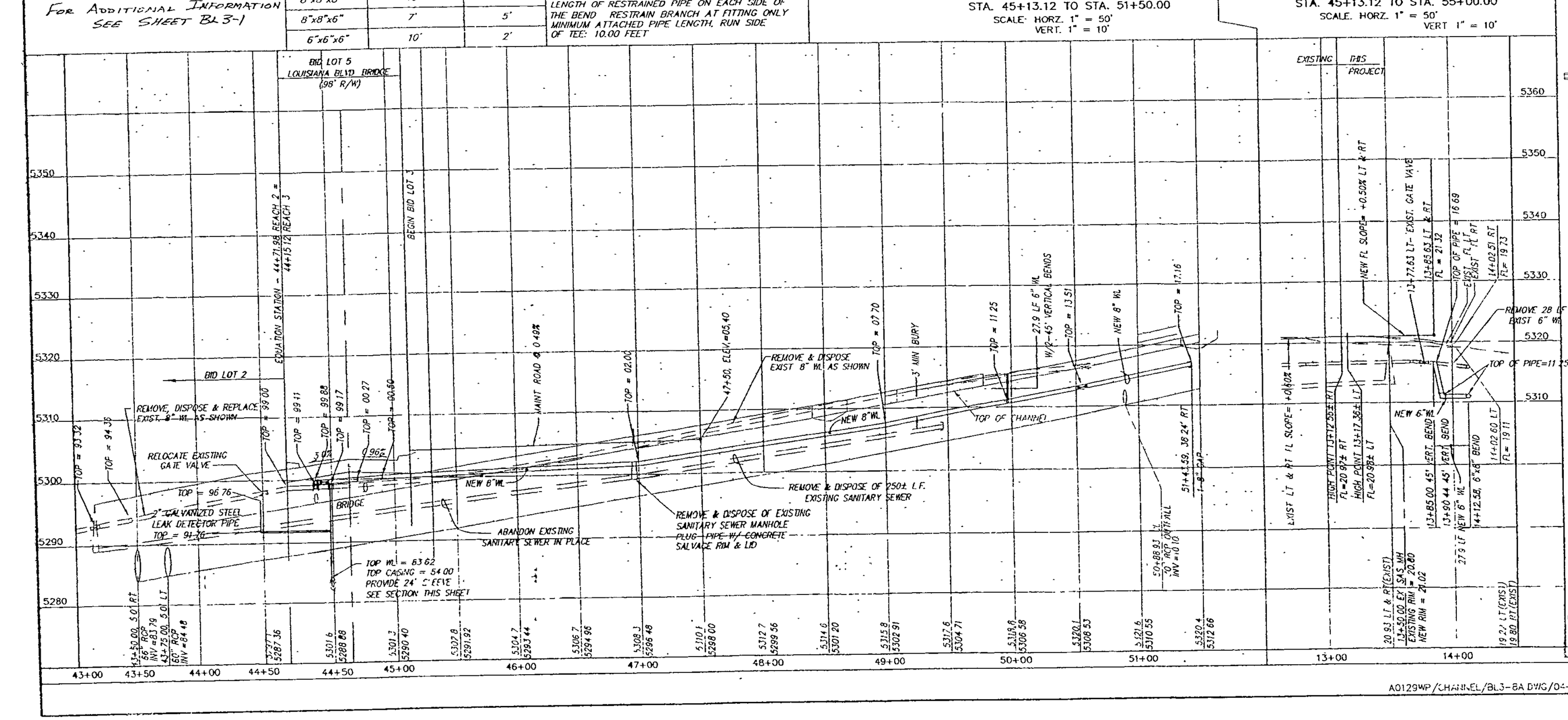
RESTRAINED JOINT LENGTH FOR TEES (FT.)		
PIPE SIZE	RUN	BRANCH
14"x14"x8"	8'	5'
8"x8"x8"	13'	3'
8"x8"x6"	7'	5'
6"x6"x6"	10'	2'

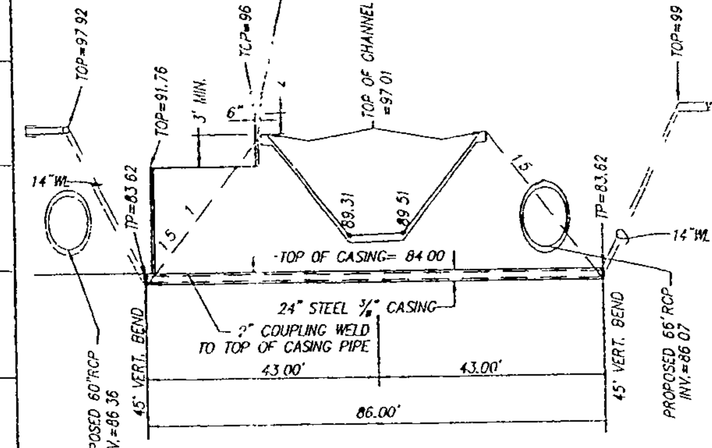
RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)					
PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	3'	2'	46'
8"	22'	9'	4'	2'	60'
14"	--	--	--	--	--

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET

SCALE: 1" = 50'
LA CUEVA CHANNEL
STA. 45+13.12 TO STA. 51+50.00
SCALE- HORZ. 1" = 50'
VERT. 1" = 10'

SCALE: 1" = 50'
JASPER DRIVE NE
STA. 45+13.12 TO STA. 55+00.00
SCALE. HORZ. 1" = 50'
VERT 1" = 10'





WATERLINE SECTION — STATION 44+49.12
SCALE. 1" = 20'H 1"=10' V

AS BUILT INFORMATION

CONTRACTOR: MARK'S CHIMNEY CAPPERS — DATE: 1/03
WORK STAKED BY: SURVEYING — DATE: 7/02
AS-BUILTED BY: CARTESIAN — DATE: 1/03
FIELD BOOK(S): BL8-1 PG 32 — DATE: 7/02
DRAWINGS REVISED BY: CARTESIAN — DATE: 1/03
CONTROL: MICRO-FILM INFORMATION

RECORDED BY:
DATE:
NO:

BENCH MARKS

1-B20", THE STATION IS LOCATED 9 MILES N.E. OF DOWNTOWN ALBUQUERQUE TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT STATION MARK IS A STANDARD AGS BRASS TABLET, STAMPED 1-B20" X = 410,237.56, Y = 1,524,062.46, G-O = 99864740
DELTA ALPHA = 0°07'23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510' (SLD 1929)

SURVEY INFORMATION

NO	DATE	FIELD NOTES BY

ENGINEER'S SEAL
DAVID MARK GOODWIN
NEW MEXICO
9862
REGISTERED PROFESSIONAL ENGINEER
9/12/02

NO	DATE	REMARKS
	9/02	DESIGNED BY GJK
	9/02	DRAWN BY RDQ
	9/02	UNCHECKED BY DMG

dmg
MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

BID LOT 3
LA CUEVA ARROYO REACH 3

TITLE
UTILITY PLAN & PROFILE
STA. 45+13.12 TO STA 55+00

SEP 12 2002
CITY ENGINEER
SEP 12 2002
CITY SURVEYOR
LAST DESIGN UPDATE

CITY PROJECT NO. 677181
ZONE MAP NO C-19-Z
SHEET BL3-8

FOR ADDITIONAL INFORMATION SEE SHEET BL3-1

A0129WP/CHANNEL/BL3-8A.DWG/04-12-02/ WP NUM RDQ

RECORD DRAWINGS

DRAWINGS REQUIRED

1 GENERAL NOTES AND ESTIMATED QUANTITIES
2 BRIDGE PLAN AND TRANSVERSE SECTION
3 BRIDGE LONGITUDINAL AND TYPICAL SECTIONS
4 PRESTRESSED VOIDED SLAB BEAM DETAILS
5 PRESTRESSED VOIDED SLAB BEAM DETAILS

STANDARD DRAWINGS REQUIRED

METAL RAILING TYPE D, CITY OF ALBUQUERQUE DWG. 2604

GENERAL NOTES

1. CONSTRUCTION SPECIFICATIONS: CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 WITH UPDATES AND APPLICABLE SUPPLEMENTAL SPECIFICATIONS

2. CONCRETE: CONFORM WITH THE SPECIFICATIONS FOR STRUCTURAL CONCRETE 4000 PSI CHAMFER ALL EXPOSED EDGES OF STRUCTURES 3/4" UNLESS OTHERWISE NOTED

FURNISH A CLASS 2 SURFACE FINISH FOR ALL EXPOSED CONCRETE SURFACES.

3. REINFORCING BARS: PROVIDE ASTM A615, GRADE 60 BARS UNLESS NOTED OTHERWISE DIMENSIONS SHOWN REFER TO THE CENTEPLINE OF BARS UNLESS OTHERWISE NOTED

FURNISH EPOXY COATED REINFORCING STEEL IN THE TOPS AND ENDS OF THE PRESTRESSED BEAMS AND IN THE SIDEWALKS.

4 STRUCTURAL STEEL PROVIDE THE GRADE(S) LISTED BELOW:

COMPONENT	GRADE ASTM A36
ALL	

5. PRECAST PRESTRESSED CONCRETE VOIDED SLAB PANELS: SEE NOTES ON SHEET BL4-4

6. WATERPROOFING MEMBRANE: APPLY A WATERPROOFING MEMBRANE TO ENDS OF PRESTRESSED BEAMS AND OVER ALL LONGITUDINAL BEAM JOINTS. FURNISH "PETRO MAT", "AMOPAVE", OR APPROVED EQUAL, CONSISTING OF A PAVING FABRIC WITH APPROXIMATELY 0.25 GAL./SQ. YD. OF HOT APPLIED ASPHALT CEMENT (AC-10) INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. DAMP PROOF SYSTEM APPLY DAMP PROOF SYSTEM TO THE BACKS OF ALL CAST-IN-PLACE CONCRETE WALLS AND TOP SURFACES OF ABUTMENT FOOTINGS OBTAIN ENGINEER'S APPROVAL PRIOR TO USE.

8 BRIDGE NUMBER PLATE: FURNISH 2 BRIDGE NUMBER PLATES CONFORMING TO THE DETAILS SHOWN. THE COST OF THE PLATES SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND WILL NOT BE PAID FOR DIRECTLY.

9. EXISTING UTILITIES: VERIFY IN THE FIELD THE LOCATIONS OF ALL EXISTING UTILITIES, CABLES, PIPES, OR CONDUIT WHICH MUST BE REMOVED, RELOCATED OR PROTECTED FROM DAMAGE BEFORE PROCEEDING WITH THE NEW WORK.

10. PERMANENT ANTI-GRAFFITI PROTECTIVE COATING APPLY TO THE FOLLOWING SURFACES:
A EXTERIOR EDGES OF SIDEWALKS
B. EXTERIOR SURFACES OF EXTERIOR GIRDERS
C EXPOSED SURFACES OF ABUTMENTS AND WINGWALLS.

11. VERIFY IN THE FIELD ALL DIMENSIONS, ELEVATIONS, AND DETAILS WHICH WILL BE INVOLVED IN THE NEW CONSTRUCTION BEFORE PROCEEDING WITH NEW WORK.

DESIGN DATA

DESIGN IS IN ACCORDANCE WITH AASHTO SPECIFICATIONS, 1996 EDITION AND CURRENT INTERIMS

DESIGN STRESSES.
STRUCTURAL STEEL ASTM A36, Fy = 36,000 PSI
(PERTAINS TO MISC STEEL, NOT REINFORCING BARS)

REINFORCED CONCRETE: f'c = 4000 PSI AT 28 DAYS

LIVE LOAD: HS20-44

HORIZONTAL EARTH PRESSURE
ACTIVE PRESSURE: 34 PCF EQUIV. FLUID PRESSURE
AT-REST PRESSURE: 60 PCF EQUIV FLUID PRESSURE
PASSIVE PRESSURE: 300 PCF EQUIV FLUID PRESSURE

WIND VELOCITY: 75 MPH

MAXIMUM COMPUTED FOOTING LOADS:
ABUTMENT NO. 1 1.0 TON/SQ. FT.
ABUTMENT NO 2 1 0 TON/SQ FT

REFER TO PROJECT GEOTECHNICAL REPORT FOR STRUCTURAL FILL AND OTHER GEOTECHNICAL REQUIREMENTS.

GEOTECHNICAL INVESTIGATION
SAN PEDRO STREET CROSSING
OVER THE LA CUEVA CHANNEL,
BY VINEYARD & ASSOC., INC.,
DATED SEPTEMBER 8, 2001

INCIDENTAL ITEMS

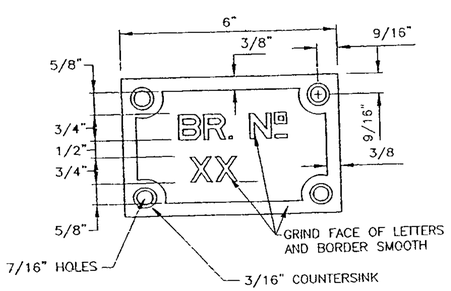
1. BRIDGE NUMBER PLATES
2. ELASTOMERIC BEARING PADS
3. STEEL DOWELS
3. WATERPROOFING MEMBRANE
4. DAMP PROOFING SYSTEM
5 1/2" PREFORMED BITUMINOUS JOINT FILLER
6. PERMANENT ANTI-GRAFFITI PROTECTIVE COATING

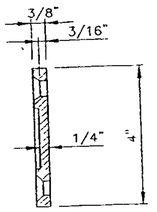
NOTE.
ITEMS LISTED ARE ONLY A GENERAL DESCRIPTION OF THE REQUIRED WORK AND MATERIALS, AND MAY NOT BE COMPLETE PARAGRAPH 104 1 OF THE STANDARD SPECIFICATIONS APPLIES. THIS LIST DOES NOT INCLUDE ANY INCIDENTAL WORK OR MATERIAL REQUIRED BY SPECIAL PROVISIONS, SERIALS (STANDARD DETAILS), SUPPLEMENTAL SPECIFICATIONS OR THE STANDARD SPECIFICATIONS.

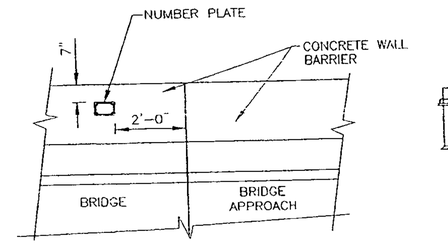
ESTIMATED QUANTITIES

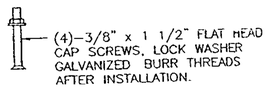
ITEM NO.	ITEM	UNIT	TOTAL *
	RESIDENTIAL ASPHALT 1.5" LIFT (2-1.5" LIFTS)	SQ. YDS.	350
	EXCAVATION AND COMPACTED BACKFILL FOR STRUCTURES	CU YDS.	200
	4000 PSI STRUCTURAL CONCRETE (TINTED)	CU YDS.	140
	4000 PSI STRUCTURAL CONCRETE (NON-TINTED) (ABUTMENT WALLS AND SIDEWALKS)	CU. YDS.	75
	15" x 60" PRECAST PRESTRESSED CONCRETE VOIDED SLAB PANELS	LIN FT.	280
	18" x 60" PRECAST PRESTRESSED CONCRETE VOIDED SLAB PANELS	LIN. FT	140
	TYPE D METAL BRIDGE RAILING	LUMP SUM	1

* INCLUDES CONCRETE CHANNEL FROM STATION 14+71 06 TO STATION 15+66 06.









PARTIAL ELEVATION

NOTES:

TWO PLATES WITH BOLTS REQUIRED FOR EACH BRDIGE. MATERIAL EQUALS CAST IRON, RAISED BLOCK LETTER OF NEAT SQUARE CUT DESIGN, GRIND FACE, & HOT DIPPED GALV.

EACH PLATE IS TO BE PLACED AT EACH END OF THE BRIDGE ON THE ROADWAY FACE OF THE CONCRETE BARRIER RAILING AT THE END OF THE DECK LOCATE ON RIGHT SIDE AS ONE APPROACHES BRIDGE

BRIDGE NUMBER PLATE DETAILS

AS-BUILT INFORMATION
CONTRACTOR MOORE & STEWART CONTRACTORS DATE 7/03
WORK STARTED 7/03 COMPLETED 8/03
INSPECTED BY DAT DATE 7/03
DRAWINGS CORRECTED AS BUILT BY [illegible] DATE 7/03
DRAWINGS CORRECTED BY SURVEYOR [illegible] DATE 7/03

MICRO-FILM INFORMATION
RECORDED BY DATE NO

BENCH MARKS
A STANDARD ACS BRASS TABLET, STAMPED "1-B20" LOCATED IN THE NE QUAD OF THE INTERSECTION OF BRASTON ST NE AND MODESTO AVE NE
N=1524092.46, E=1410237.58, Y=1524092.46, X=1410237.58
G-Geo 0.9996740, Ass=0°01'33", CENTRAL ZONE, (NAD 1927)
ELEV=5474.510' (SLD 1929)

SURVEY INFORMATION
NO. BY DATE

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD S.E.
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 898-8021

LA CUEVA CHANNEL

GENERAL NOTES & ESTIMATED QUANTITIES

REVISIONS	NO	DATE	REMARKS	BY

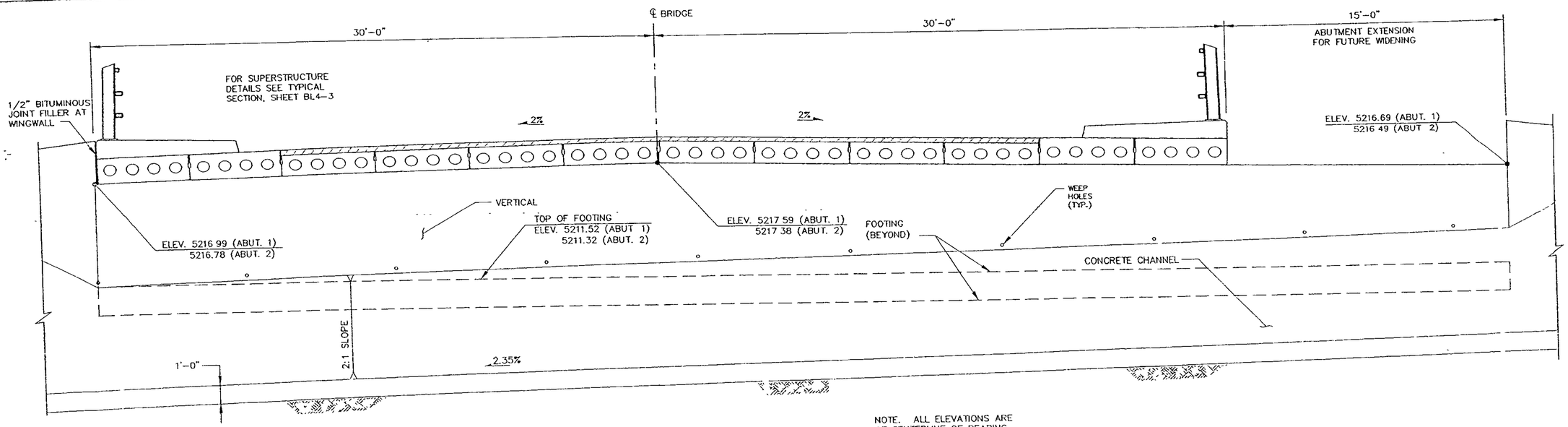
DESIGN	GWK	WCEA NO. X1218035	DATE MAR 2002
DRAWN	WEP	PROJECT NO. 677181	SHEET NO BL4-1
CHECK	GH		

P.E. SEP 13 2002 DESIGN REVIEW COMMITTEE

P.E. SEP 13 2002 CITY ENGINEER

GARY W. KLEIN 14366 REGISTERED PROFESSIONAL ENGINEER 8/13/02

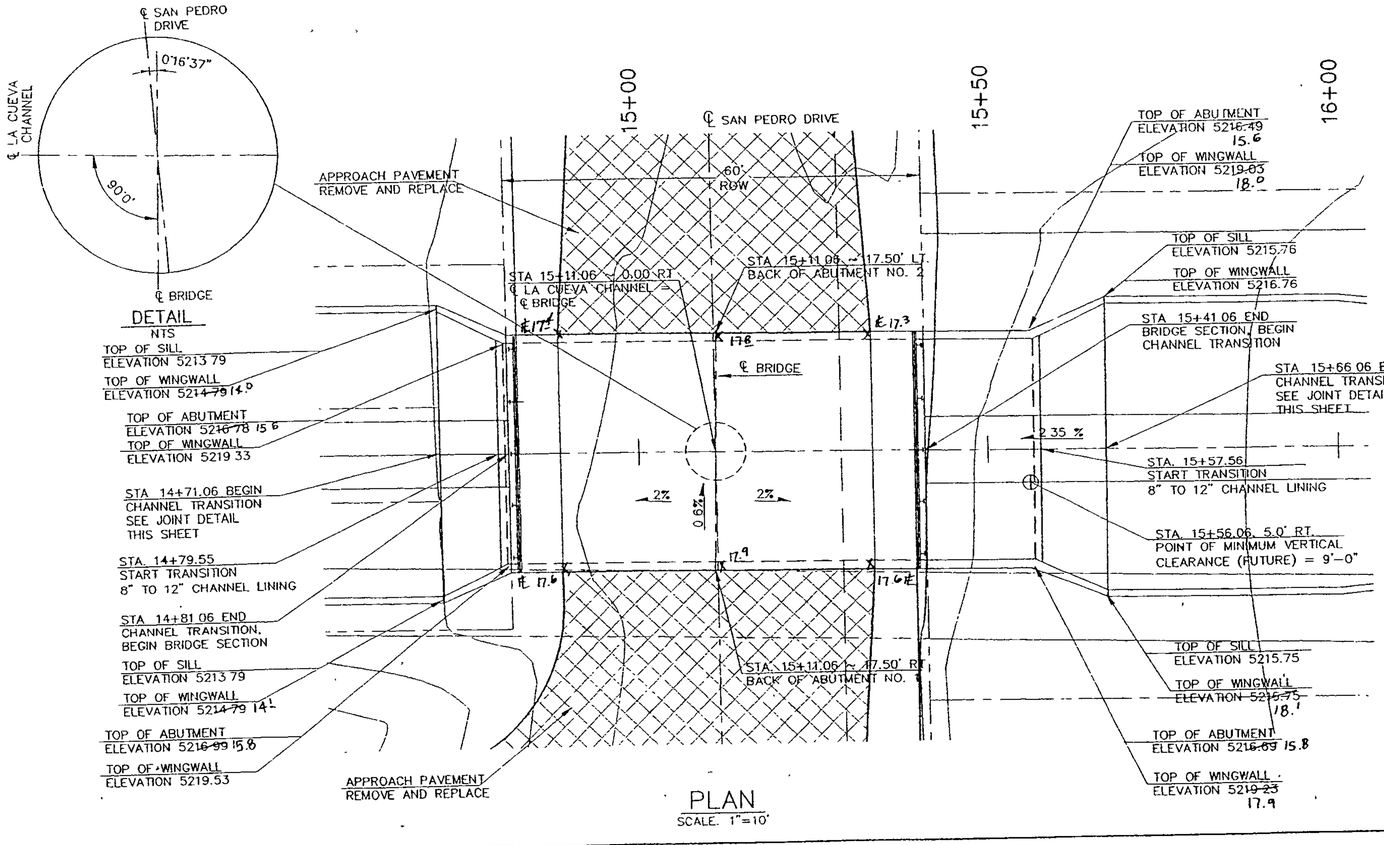
RECORD DRAWINGS



TRANSVERSE SECTION @ ℄ CHANNEL

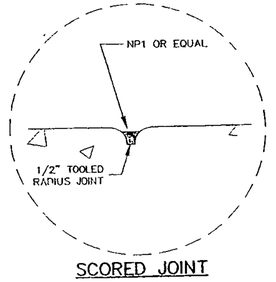
(LOOKING NORTH)
SCALE 3/8"= 1'-0"

NOTE. ALL ELEVATIONS ARE AT CENTERLINE OF BEARING SEE PLAN BELOW FOR TOP OF WINGWALL ELEVATIONS



PLAN

SCALE. 1"=10'



SCORED JOINT DETAIL

SURVEYOR'S CERTIFICATION

I, WILL PLOTNER JR. A DULY QUALIFIED REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND "AS-BUILT" SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION AND THAT THIS "AS-BUILT" INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CO-DEPTS CALCULATIONS, ENGINEERING OR INTENT OF THE RECORD DRAWINGS

WILL PLOTNER JR. NMPS 14271

WILL PLOTNER JR. NEW MEXICO 14271 REGISTERED PROFESSIONAL SURVEYOR

AS-BUILT INFORMATION
CONTRACTOR MARC I CHUART CONTRACTORS DATE
SURVEYED BY SCHAFER INC DATE 7/03
FIELD VERIFICATION BY SCHAFER INC DATE 7/03
MICRO-FILM INFORMATION
RECORDED BY
DATE
ITEM

BENCH MARKS
A STANDARD AGS BRASS TABLET, STAMPED "1-B20" LOCATED IN THE NE QUAD OF THE INTERSECTION OF RAINBOW ST. NE AND MODESTO AVE. NE. X=410,237.56, Y=1,524,092.45, G-O=0.99954740, Jos=010'23", CENTRAL ZONE, (NAD 1927), ELEV=5474.510' (SEA LEVEL 1929)

SURVEY INFORMATION

NO.	DATE	BY

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD SE
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 898-8021

LA CUEVA CHANNEL

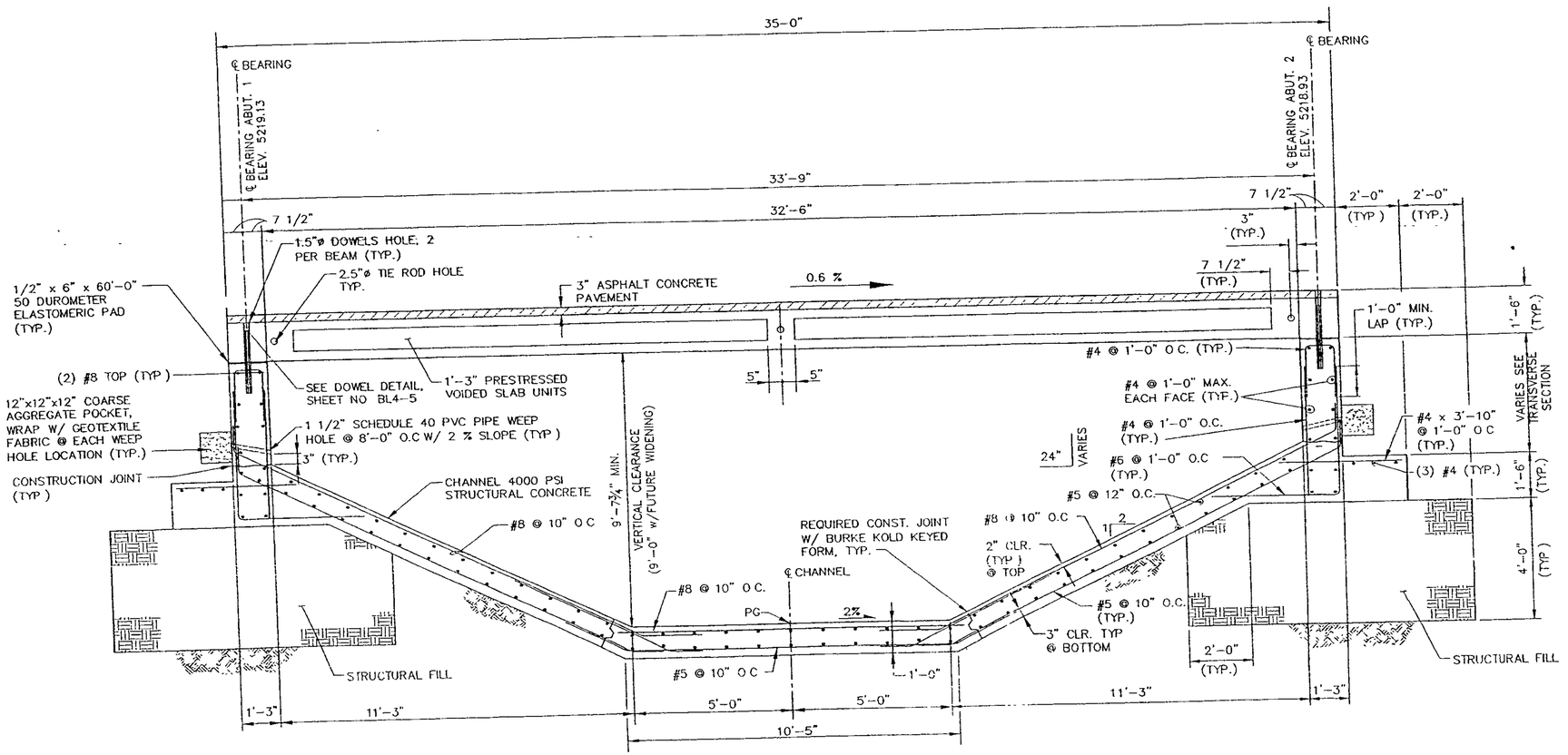
BRIDGE PLAN AND TRANSVERSE SECTION

REVISIONS	NO	DATE	REMARKS	BY

GARY W. KINCAID NEW MEXICO 14366 PROFESSIONAL ENGINEER 4/12/02

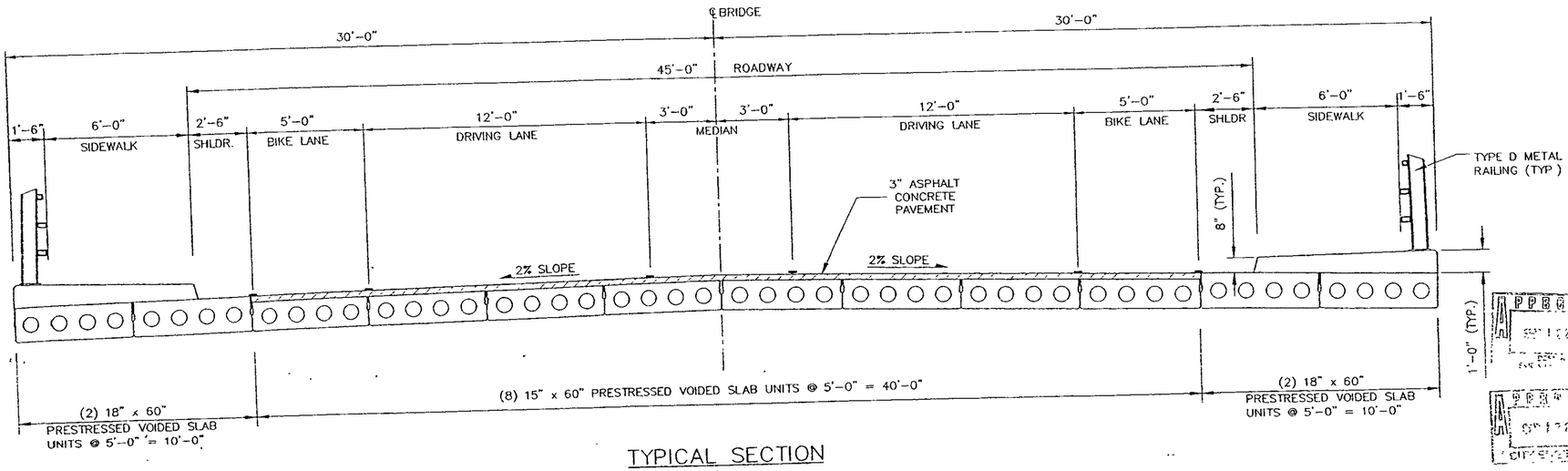
DESIGN	GWK	WCEA NO X1218035	DATE MAR 2002
DRAWN	WEP	PROJECT NO. 677181	SHEET NO BL4-2
CHECK	GN		

RECORD DRAWINGS



SECTION AT BRIDGE (LOOKING DOWNSTREAM)

SCALE 1/2"=1'-0"



TYPICAL SECTION

SCALE 3/8"=1'-0"

APPROVED
CITY ENGINEER

APPROVED
COUNTY ENGINEER

MICRO-FILM INFORMATION
DATE
RECORDED BY
NO

AS-BUILT INFORMATION
CONTRACTOR MARK V. CHUART CONTRACTORS
DATE 7/03
INSPECTOR'S INITIALS DHT
DRAWING CORRECTED BY CONTRACTOR DATE 7/03
DRAWING CORRECTED BY ENGINEER DATE 7/03
VERIFICATION BY SURVEY DATE 7/03

BENCH MARKS
1) STANDARD ACS BRASS TABLET, STAMPED, "1-B20" LOCATED IN THE NE QUAD OF THE INTERSECTION OF BARSTOW ST NE AND MODESTO AVE NE. X=410,232.56, Y=1,524,032.46, ELEV=5474.61' (NAD 1927) ELEV=5474.61' (NAD 1929)
G-O=0.99984740, Abm=0°10'23", CENTRAL ZONE, (NAD 1927)

SURVEY INFORMATION
NO | DATE | BY

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD S.E.
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 898-8021

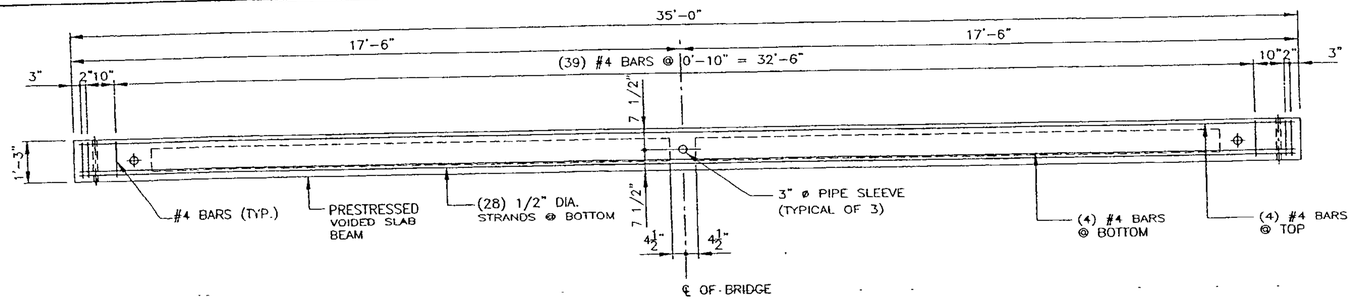
LA CUEVA CHANNEL

BRIDGE LONGITUDINAL AND TRANSVERSE SECTIONS

REVISIONS	NO	DATE	REMARKS	BY

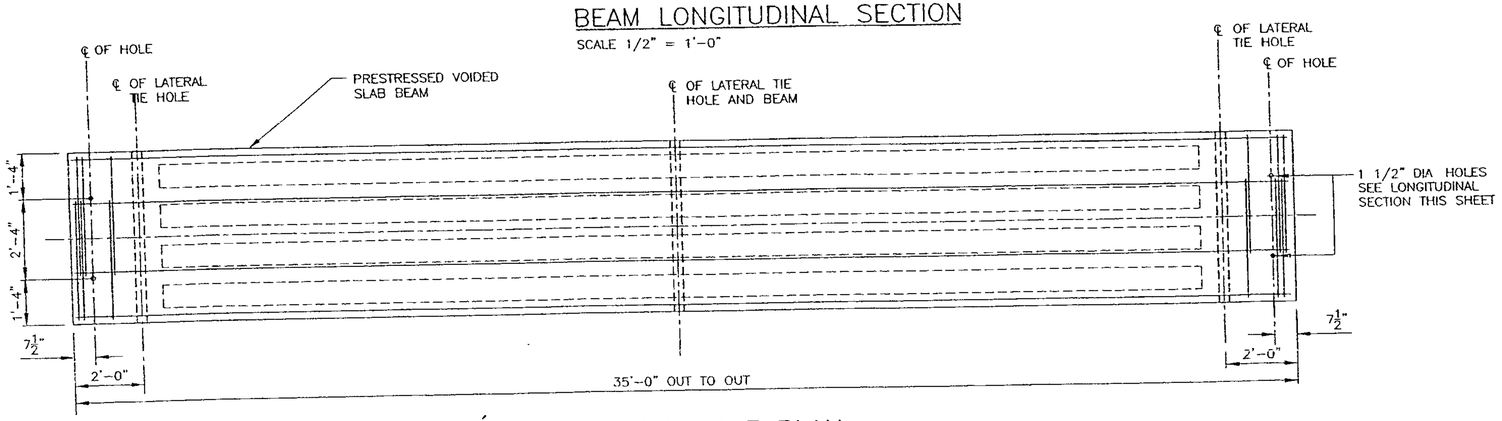
GARY W. KINCAID 14356 REGISTERED PROFESSIONAL ENGINEER 4/12/02

DESIGN	GWK	WCEA NO X1218035	DATE MAR 2002
DRAWN	WEP	PROJECT NO. 677181	SHEET NO BL4-3
CHECK	GN		



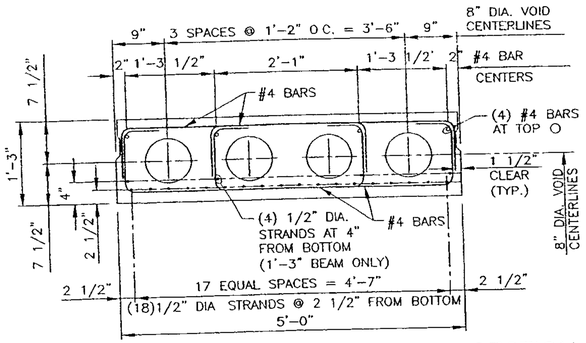
BEAM LONGITUDINAL SECTION

SCALE 1/2" = 1'-0"



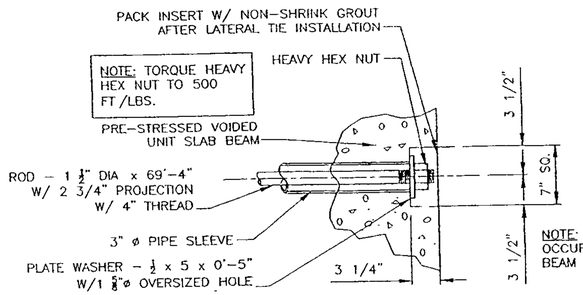
BEAM LAYOUT PLAN

SCALE 1/2" = 1'-0"



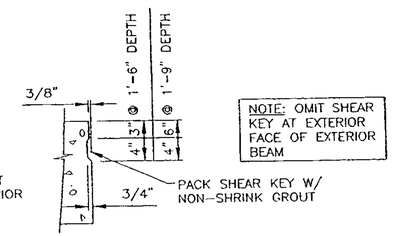
TYPICAL INTERIOR BEAM SECTION

SCALE 1" = 1'-0"



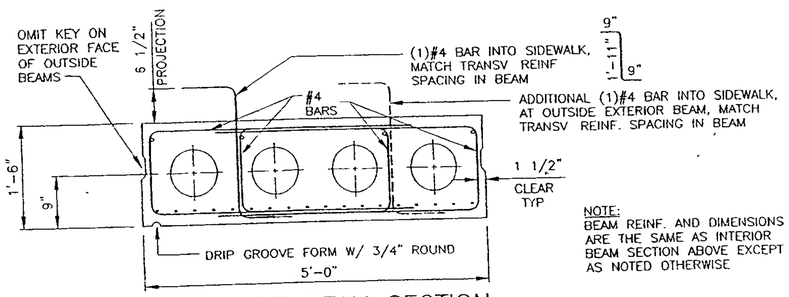
LATERAL TIE & INSERT DETAIL

SCALE 1 1/2" = 1'-0"



SHEAR KEY DETAIL

SCALE 1" = 1'-0"



EXTERIOR BEAM SECTION

SCALE 1" = 1'-0"

NOTE:
BEAM REINF. AND DIMENSIONS ARE THE SAME AS INTERIOR BEAM SECTION ABOVE EXCEPT AS NOTED OTHERWISE

BEAM DATA

	WEIGHT	CAMBER @ RELEASE	CAMBER @ ERECTION	DEAD LOAD DEFLECTION
INTERIOR BEAM	25,210 LBS	0.61"	1.09"	0.44"
EXTERIOR BEAM	31,770 LBS	0.38"	0.67"	0.36"

GENERAL NOTES FOR PRESTRESSED VOIDED SLAB BEAMS

1 INCLUDE THE COST OF REINFORCING BARS AND STRUCTURAL STEEL EMBEDDED IN BRIDGE BEAMS IN THE UNIT PRICE BID FOR PRESTRESSED VOIDED SLAB BEAM.

2. LIFT BEAMS BY MEANS OF DEVICES THAT ARE SATISFACTORY TO THE ENGINEER. OBTAIN ENGINEER'S APPROVAL OF LIFTING DEVICES PRIOR TO USE. CAST, STORE, AND HAUL BEAMS IN UPRIGHT POSITION.

3. THE CAMBER AT ERECTION DIMENSION LISTED IS THE CALCULATED VALUE DUE TO THE EFFECT OF PRESTRESSING WITH THE WEIGHT OF THE BEAM ACTING, WITH AN ALLOWANCE FOR CAMBER GROWTH TO 90 DAYS. . .

4. DEAD LOAD DEFLECTION IS THE COMPUTED DEFLECTION DUE TO WEIGHT OF SUPERIMPOSED DEAD LOAD

5. THE DESIGN SHOWN IS BASED ON THE USE OF 1/2" DIAMETER LOW-RELAXATION STRANDS MEETING THE REQUIREMENTS OF AASHTO M-203 (GRADE 270). FOR STRANDS MEETING THE REQUIREMENTS OF AASHTO M-203, WITH PROPERTIES OTHER THAN THESE, SUBMIT THE REVISED DETAILS SHOWING NUMBER AND ARRANGEMENT OF ALTERNATE STRANDS TO THE ENGINEER FOR APPROVAL.

INITIAL PRESTRESSING FORCE = 30,975 LBS PER STRAND SLIGHT PRESTRESSING UP TO 33,000 LBS. PER STRAND IS ALLOWED TO OFFSET SEATING LOSSES

6. TYPE III CEMENT MAY BE USED AT THE FABRICATOR'S OPTION

7. FURNISH EPOXY COATED BARS FOR ALL REINFORCING BARS THAT PROJECT FROM THE TOP OF THE BOX BEAM AND BARS LOCATED WITHIN FOUR FEET OF THE BEAM ENDS (NOT INCLUDING ABUTMENTS)

8. THOROUGHLY WIRE BRUSH THE TOP SURFACE OF ALL BEAMS TO REMOVE ALL LAITANENCE

DESIGN DATA

DESIGN IS IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS, 1996 EDITION AND CURRENT INTERIMS

BEAMS:
f'ci (MIN. COMPRESSIVE STRENGTH OF CONCRETE AT TIME OF INITIAL PRESTRESS) = 4750 PSI
f'c = 5,500 PSI, n = 7

PRESTRESSING STEEL:
1/2" DIAMETER SEVEN WIRE LOW RELAXATION STRANDS
fs = 41,300 LBS PER STRAND
f*y = 37,100 LBS PER STRAND

CONVENTIONAL REINFORCING BARS
fy = 60,000 PSI

ALLOWANCE FOR FUTURE WEARING SURFACE = 30 PSF

LIVE LOAD = HS20-44

BENCH MARKS
1. A STANDARD ACE BRASS TABLET, S AND PID "T-820" LOCATED IN THE NE QUAD OF THE INTERSECTION OF RAMP "T" AND I-25 SOUTHBOUND EXIT NO. 224, 0.2 MILES SOUTH OF I-25 AND ALAMEDA BLVD. N=1,524,092.45, E=1,510,237.56, ELEV.=5424.510' (NAD 1929)
2. A STANDARD ACE BRASS TABLET, S AND PID "T-821" LOCATED IN THE NE QUAD OF THE INTERSECTION OF RAMP "T" AND I-25 SOUTHBOUND EXIT NO. 224, 0.2 MILES SOUTH OF I-25 AND ALAMEDA BLVD. N=1,524,092.45, E=1,510,237.56, ELEV.=5424.510' (NAD 1929)

SURVEY INFORMATION: A STANDARD ACE BRASS TABLET, S AND PID "T-820" LOCATED IN THE NE QUAD OF THE INTERSECTION OF BARSTOW ST. NE AND LOUISIANA BLVD. NE. N=1,524,092.45, E=1,510,237.56, ELEV.=5424.510' (NAD 1929) G-G=0.99956740, A=-0°10'23", CENTRAL ZONE, (NAD 1927), E=1,510,237.56, N=1,524,092.45, ELEV.=5424.510' (NAD 1929)

NO.	DATE	BY

AS-BUILT INFORMATION
CONTRACTOR: MARC V. CUBART CONTRACTORS, INC. DATE 7/03
ENGINEER: WILSON & COMPANY, INC. DATE 7/03
SURVEYOR: CENTURY SURVEYING, INC. DATE 7/03

MICRO-FILM INFORMATION
RECORDED BY: NO. DATE 7/03

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD SE
SUITE 100
RIO RANCHO NEW MEXICO
87124
(505) 893-8021

LA CUEVA CHANNEL

PRESTRESSED VOIDED SLAB : BEAM DETAILS

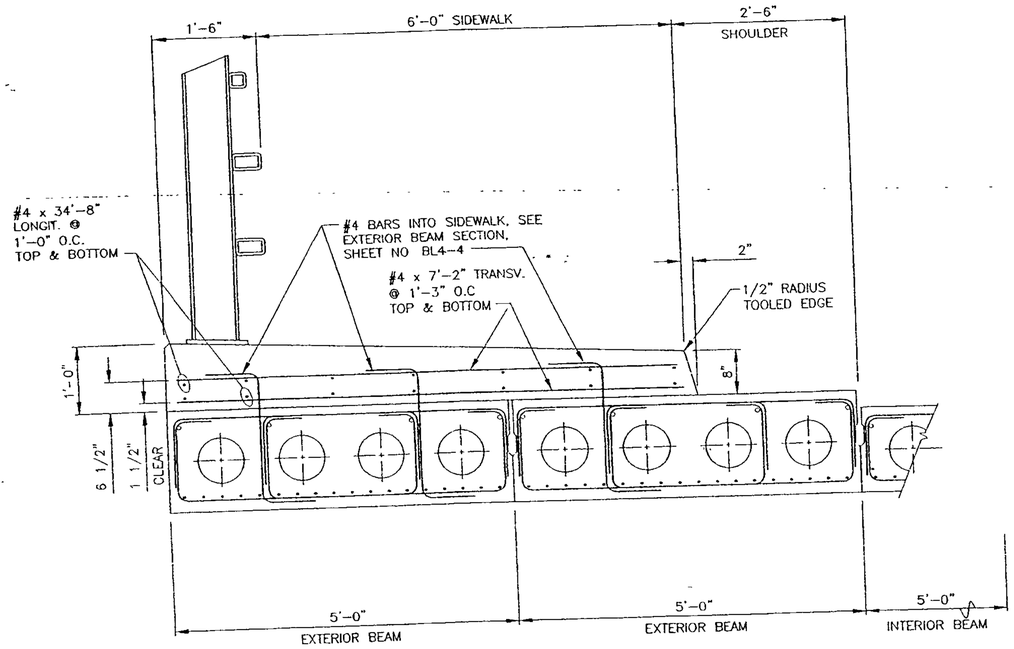
REVISIONS NO	DATE	REMARKS	BY

GARY W. KINSEY NEW MEXICO PROFESSIONAL ENGINEER 3/18/02

DESIGN	GWK	WCEA NO X1218035	DATE MAR 2002
DRAWN	WEP	PROJECT NO 677181	SHEET NO BL4-4
CHECK	GN		

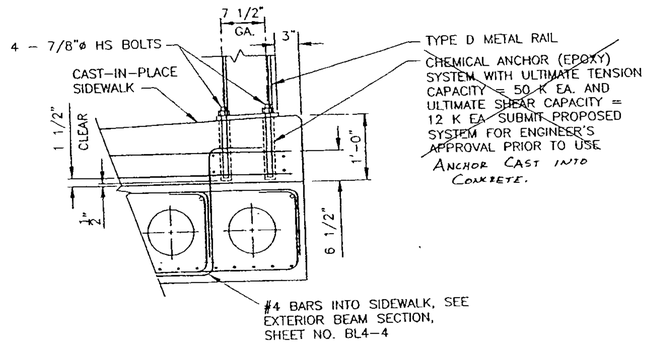
T:\Projects\X1218\10218035-Redesign\M\Sheets\Bridge\Beam_Plan.dwg 03/18/02 09:48:01 AM MST

RECORD DRAWINGS



EXTERIOR BEAMS DETAIL

SCALE 1" = 1'-0"

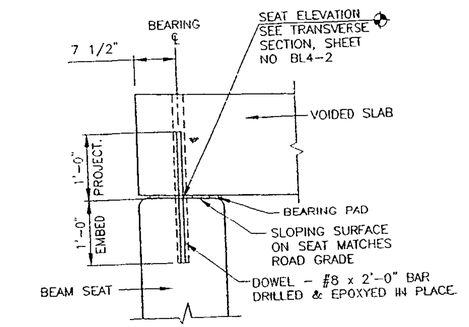


METAL RAIL ATTACHMENT

SCALE 1"=1'-0"

NOTE.

1. ALL HARDWARE REQUIRED FOR INSTALLATION INSTALLATION OF RAILING SHALL BE INCIDENTAL TO THIS ITEM.

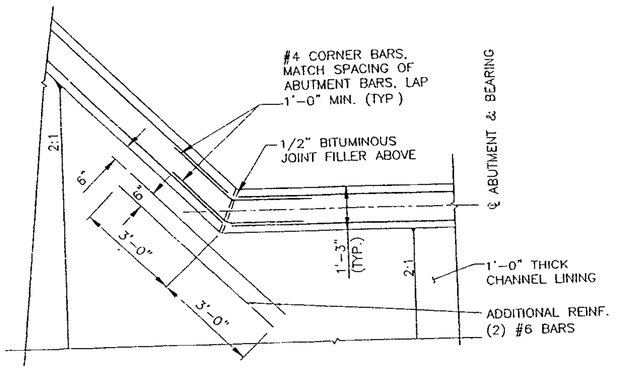


BEAM SEAT DETAIL

SCALE 1"=1'-0"

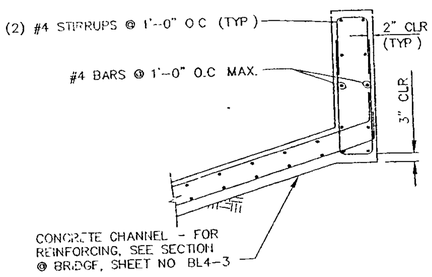
NOTE.

1. DOWEL AND BEARING PAD SHALL BE INCIDENTAL TO THE VOIDED SLAB.



ABUTMENT CORNER DETAIL & ADDITIONAL CORNER REINFORCING

N.T.S

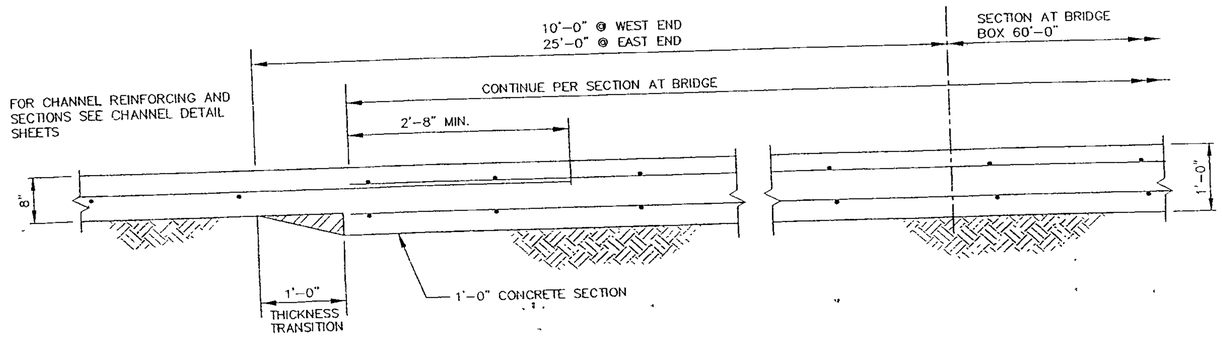


SECTION @ WINGWALL

SCALE 1"=1'-0"

NOTE:

1 LONGITUDINAL BARS AND #8 BAR IN SILL TERMINATE AT BSE OF WINGWALL



CHANNEL TRANSITION SECTION AND CONTINUOUS REINFORCEMENT DETAIL

SCALE 1"=1' STA 14+71 06 TO 14+81.06
AND
STA 15+41.06 TO 15+66.06

MICRO-FILM INFORMATION
RECORDED BY: NO DATE 7/02
AS-BUILT INFORMATION
CONTRACTOR: MOORE & COMPANY CONTRACTORS DATE 7/03
RECORDED BY: CARPENTER FIELDS DATE 7/03
VERIFICATION BY: BARTLETT & PARKER INC. DATE 7/03
BENCH MARKS
A STANDARD ACS BRASS TABLET, STAMPED "1-B20" LOCATED IN THE NE QUAD OF THE INTERSECTION OF BARSTOW ST NE AND MOORESTO AVE NE. X=410,237.85, Y=1,524,092.45, ELEV=5474.610' (NGVD 1929).
SURVEY INFORMATION
NO. DATE BY

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD S.E.
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 898-8021

LA CUEVA CHANNEL

PRESTRESSED VOIDED SLAB BEAM DETAILS

APPROVED

GARY W. KING 9668 REGISTERED PROFESSIONAL ENGINEER 3/18/02

REVISIONS	NO	DATE	REMARKS	BY

DESIGN	GWK	WCEA NO X12180_5	DATE MAR 200
DRAWN	WEP	PROJECT NO 677181	SHEET NO BL4-5
CHECK	GN		

18035-Redesign\MA Sheets\Bridge\Ext_Beams.dwg 03/18/02 09:56:43 AM MST

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RECORD DRAWINGS

GENERAL NOTES

1 WORKMANSHIP AND MATERIAL SHALL CONFORM TO THE NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT'S STANDARD SPECIFICATION FOR HIGHWAY AND BRIDGE CONSTRUCTION, 1994 EDITION AND APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS, EXCEPT AS NOTED.

2 GEOTECHNICAL BORINGS THE AMAFCA IS NOT RESPONSIBLE FOR ANY INTERPRETATION OR ASSUMPTIONS MADE BY THE CONTRACTOR BASED ON THE GEOTECHNICAL BORINGS BORING INFORMATION IS AVAILABLE AT THE AMAFCA.

3. CONCRETE. STRUCTURAL CAST-IN-PLACE CONCRETE SHALL BE CLASS A. CHAMFER ALL EXPOSED EDGES OF STRUCTURE 3/4 INCH UNLESS OTHERWISE NOTED.

4 DECK SLAB. THE SURFACE OF THE TOPPING SLAB SHALL BE MACHINE GROVED IN ACCORDANCE WITH THE NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENTS SPECIFICATION REQUIREMENTS FOR GROOVING DECK SLAB CONCRETE (SECTION 512). GROOVING OF DECK SLAB SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION NO DIRECT PAYMENT SHALL BE PROVIDED FOR GROOVING.

5. REINFORCING BARS. REINFORCING BARS SHALL BE GRADE 60 UNLESS NOTED OTHERWISE DIMENSIONS SHOWN REFER TO THE CENTERLINE OF BARS UNLESS NOTED OTHERWISE.

6. STRUCTURAL STEEL. STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF THE GRADES LISTED BELOW

COMPONENT	GRADE
ALL	M-183

7. DECK SLAB GROOVED FINISH SHALL RUN PARALLEL TO TRAFFIC FLOW

8 PERMANENT ANTI-GRAFFITI COATING - APPLY COATING TO THE EXTERIOR EDGES OF BEAMS, SIDEWALK, ABUTMENT WALLS AND WINGWALLS.

9 ENGINEERED FILL - THE BRIDGE ABUTMENTS AND CHANNEL UNDER THE BRIDGE SHALL BE SUPPORTED ON 4'-0" OF ENGINEERED FILL ENGINEERED FILL SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

SIEVE SIZE	PERCENT PASSING BY WEIGHT
4"	100
1"	90 - 100
NO. 4	70 - 100
NO 200	10 - 40

THE FILL MATERIAL SHALL HAVE A PLASTICITY INDEX OF FIFTEEN OR LESS.
SEE SHEET BL5-3 FOR LIMITS OF ENGINEERED FILL

DESIGN DATA

DESIGN IS IN ACCORDANCE WITH AASHTO SPECIFICATIONS 1996 EDITION AND CURRENT INTERIMS

DESIGN STRESSES: STRUCTURAL STEEL-AASHTO M-183,
FS=20,000 PSI

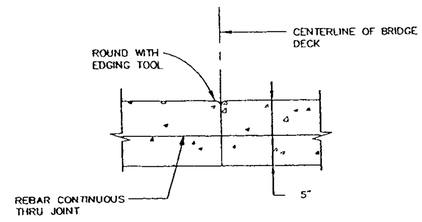
REINFORCED CONCRETE:
SUPERSTRUCTURE: F'C=4,000 PSI AT 28 DAYS
FC=1,200. PSI FS=24,000 PSI
SUBSTRUCTURE: F'C=4,000 PSI AT 28 DAYS
FC=1,200 PSI FS=24,000 PSI.
GRADE 60, N=9
PRESSTRESSED F'C=5500. PSI
CONCRETE: F'C1=4,500. PSI

LIVE LOAD: HS20-44

WEARING SURFACE: 30 PSF ALLOWANCE FOR FUTURE WEARING SURFACE

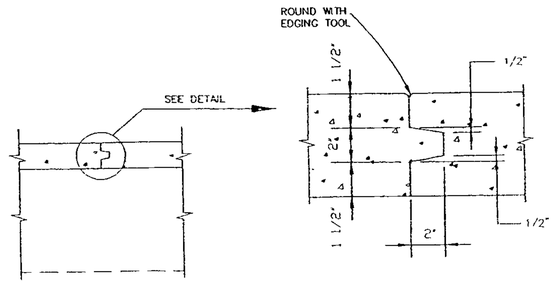
HORIZONTAL EARTH PRESSURE: 36 LBS/CU. FT. EQUIVALENT FLUID PRESSURE AND 2 FT. SURCHARGE.

ACTIVE PRESSURE: 36 PCF
AT REST 55 PCF
PASSIVE PRESSURE: 400 PCF
WIND VELOCITY 80 MPH



PERMISSIBLE LONGITUDINAL CONSTRUCTION JOINT

SCALE: NONE



TRANSVERSE CONSTRUCTION JOINT

SCALE: NONE

INCIDENTAL ITEMS

1 PERMANENT ANTI-GRAFFITI COATING
2 ELASTOMERIC BEARING PADS
3. EPOXY ANCHORS
4 TIE RODS
5. DECK SLAB MACHINE GROOVED FINISH
6 PENETRATING WATER REPELLENT TREATMENT

AS BUILT INFORMATION
CONTRACTOR MARKS + RIGHT INFORMATION DATE 7/03
STAMED BY CHRISTOPHER FOX DATE 7/03
INSPECTOR'S BHT
FIELD VERIFICATION BY J. PARRISH DATE 1/03
DRAWINGS PREPARED BY JCW DATE 1/03
CORRECTED BY JCW
MICRO-FILM INFORMATION
RECORDED BY
DATE
NO

BENCH MARKS
"I-820", THE STATION IS LOCATED 9 MILES N.E. OF DOWNTOWN ALBUQUERQUE, TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE., THE STA IS LOCATED IN THE N.E. QUADRANT
STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED
"I-820" X = 410,337.56, Y = 1,534,062.46, G-G = 99804740
DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510' (SLD 1929)

SURVEY INFORMATION
FIELD NOTES
NO | BY | DATE

ENGINEER'S SEAL
RAYMOND I. JOHNSON NEW MEXICO 9317 REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY JPG DATE 3/18/02
DRAWN BY TEP DATE 3/18/02
CHECKED BY RIJ DATE 3/18/02

101533
CMI, Inc
Mechanical / Electrical / Structural Consulting Engineers
6400 Uptown Boulevard, N.E. Suite 505E (505) 884-8868
Albuquerque, New Mexico 87110 FAX 884-7048

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

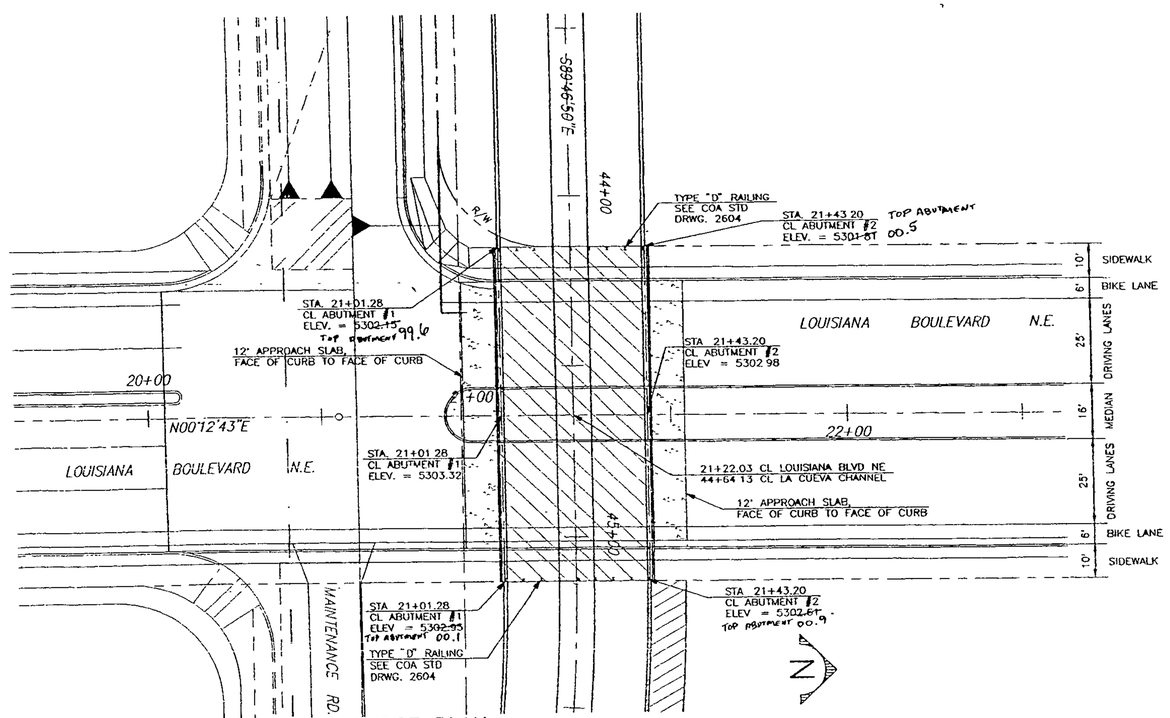
BID LOT 5
LOUISIANA BOULEVARD BRIDGE

TITLE: LA CUEVA CHANNEL
BRIDGE GENERAL NOTES AND DESIGN DATA

DESIGN REVIEW COMMITTEE: SEP 12 2002 REVIEW COMMITTEE
CITY ENGINEER APPROVAL: SEP 12 2002 CITY ENGINEER
LAST DESIGN UPDATE: MO./DAY/YR. | MO./DAY/YR.

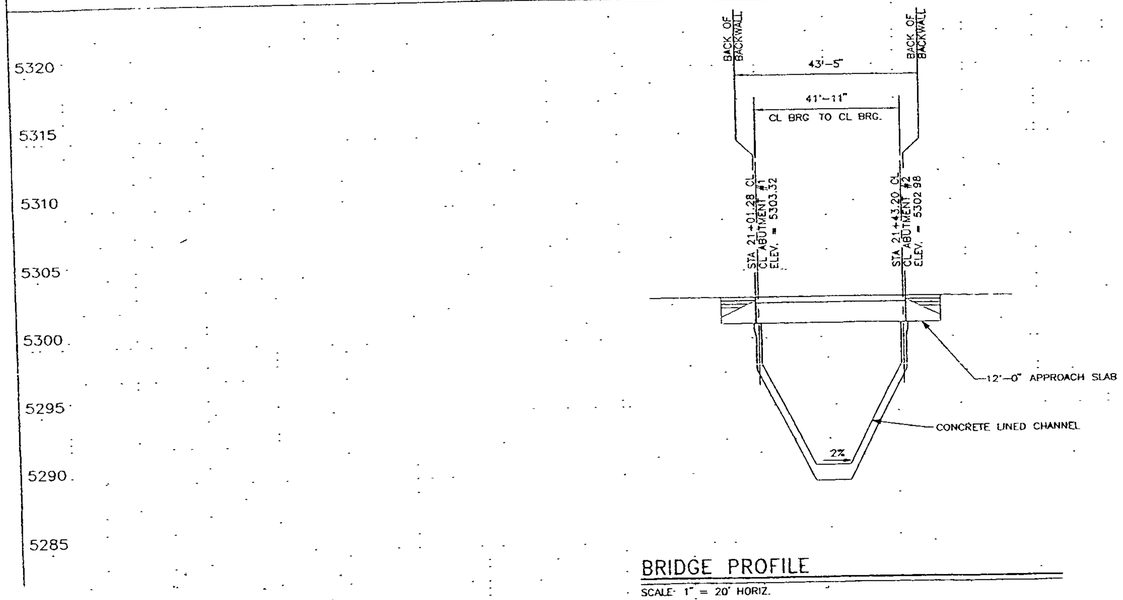
CITY PROJECT NO. 677181 | ZONE MAP NO C-19-Z | SHEET OF BL5-1

RECORD DRAWINGS



BRIDGE PLAN

SCALE: 1" = 20' HORIZ.



BRIDGE PROFILE

SCALE: 1" = 20' HORIZ.
SCALE: 1" = 5' VERT.

SURVEYOR'S CERTIFICATION

I WILL PLOTNER JR, A DULY QUALIFIED REGISTERED, PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO DO HEREBY CERTIFY THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND AS-BUILT SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION. THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION AND THAT THIS AS-BUILT INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS CALCULATIONS ENGINEERING OR INTENT OF THE RECORD DRAWINGS

Will Plotner Jr.

WILL PLOTNER JR. NMPS 11271

WILL N. PLOTNER JR. NEW MEXICO 14271 REGISTERED PROFESSIONAL SURVEYOR

AS BUILT INFORMATION
CONTRACTOR MIKE + SUNNY INFRASTRUCTURE
STAKED BY PLOTNER DATE 7/03
INSPECTIONS BY BHT DATE 7/03
FIELD REVISIONS BY CARTESIAN SURVEYS DATE 7/03
DRAWINGS REVISED BY CARTESIAN SURVEYS DATE 7/03
CORRECTED BY SUNNY JOE

BENCH MARKS
"T-B20", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT
STATION MARK IS A STANDARD AGS BRASS TABLET, STAMPED "T-B20", X = 410,237.56, Y = 1,524,092.46, G-G = 99964740
DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510' (SLD 1929)

MICRO-FILM INFORMATION
RECORDED BY DATE
NO

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL

NO	DATE	REMARKS / REVISIONS	BY
		DESIGN	JPG
	3/18/02		
		DESIGNED BY	JPG
		DRAWN BY	TEP
	3/18/02		
		CHECKED BY	RJV
	3/18/02		

VERTICAL SCALE 1" = 5'
10' 5' 0 2.5' 5'

20' 10' 0 20' 40'
HORIZONTAL SCALE: 1" = 20

101533

CME, Inc.
Mechanical / Electrical / Structural Consulting Engineers
6400 Uptown Boulevard, N.E. Suite 505E (505) 884-8868
Albuquerque, New Mexico 87110 FAX 884-7046

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

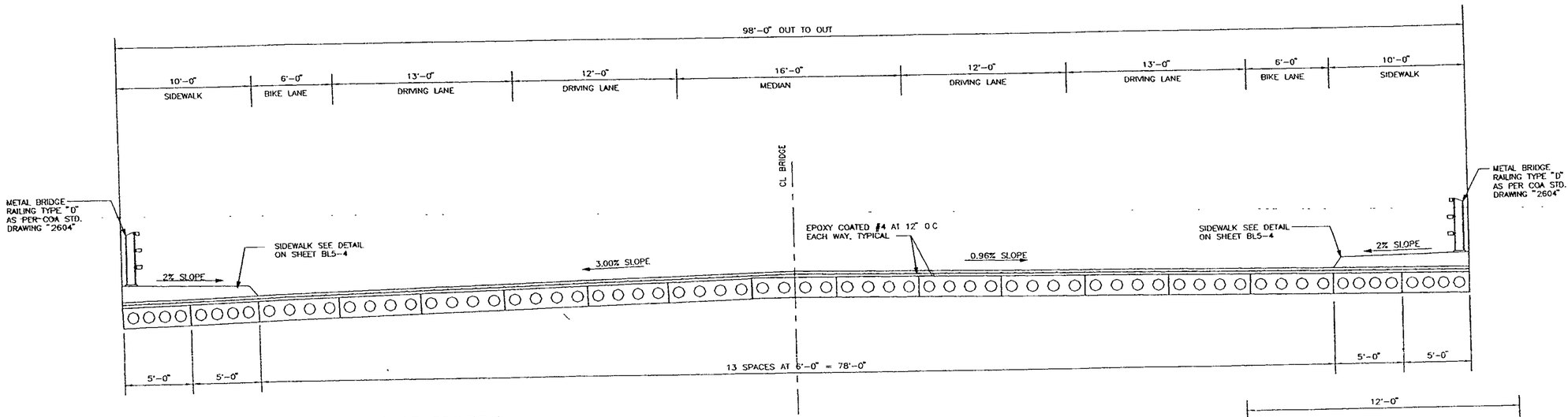
BID LOT 5
LOUISIANA BOULEVARD BRIDGE

TITLE
LA CUEVA CHANNEL
BRIDGE PLAN AND PROFILE

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
APPROVED SEP 12 2002 DESIGN REVIEW COMMITTEE	APPROVED SEP 12 2002 CITY ENGINEER			

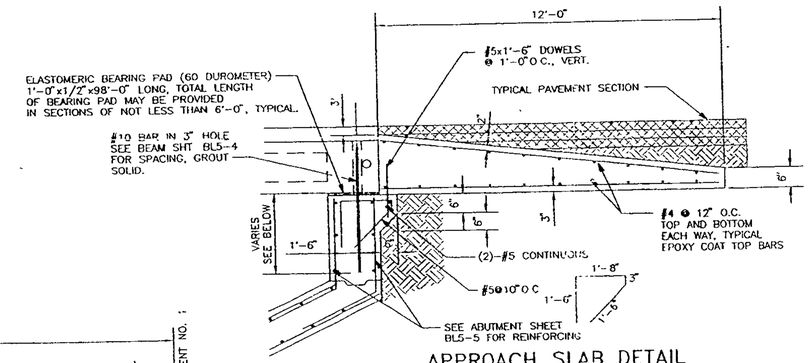
CITY PROJECT NO.	ZONE MAP NO.	SHEET OF
677181	C-19-Z	BL5-2

RECORD DRAWINGS



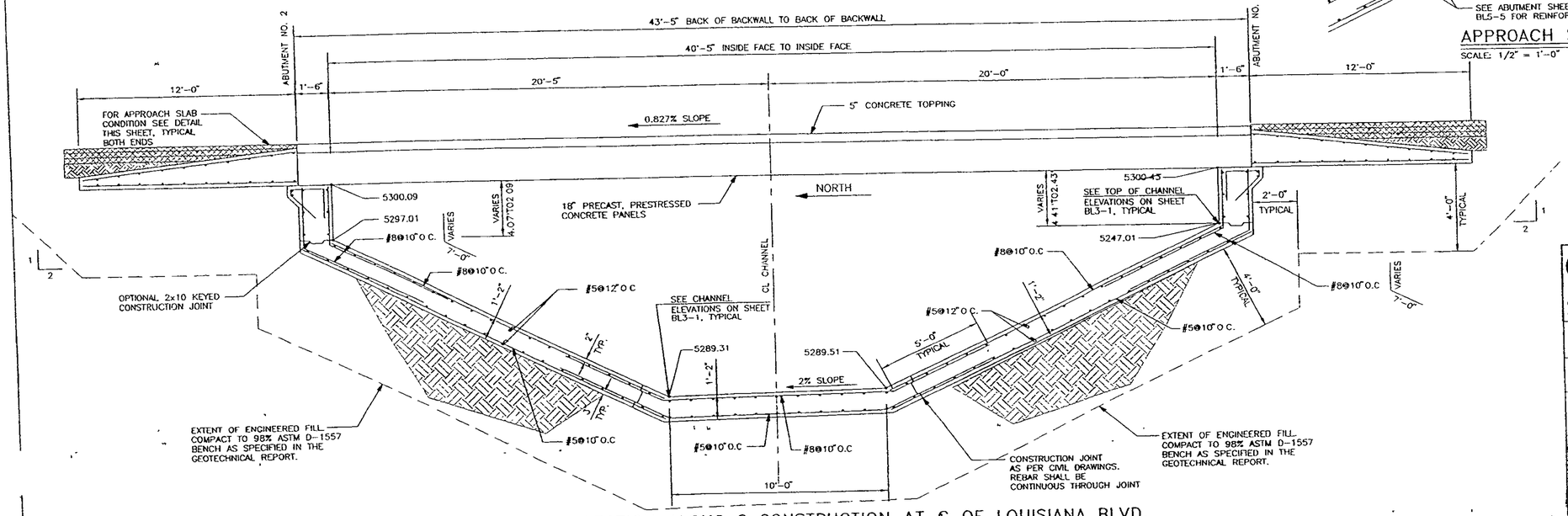
TRANSVERSE SECTION

SCALE 1/4" = 1'-0"



APPROACH SLAB DETAIL

SCALE: 1/2" = 1'-0"



LONGITUDINAL SECTION ALONG ℄ CONSTRUCTION AT ℄ OF LOUISIANA BLVD.

SCALE. 3/8" = 1'-0"

AS BUILT INFORMATION

CONTRACTOR MARK = CHANGE CHARACTERS — DATE 7/03
WORK STAKED BY SURVEYOR — DATE 7/03
VERIFICATION OF SURVEY AND DRAWINGS CONFIRMED BY — DATE 7/03

MICRO-FILM INFORMATION

RECORDED BY — DATE

NO

BENCH MARKS

"I"-8901", THE STATION IS LOCATED 9 MILES N.E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE., THE STA. IS LOCATED IN THE N.E. QUADRANT STATION MARK IS A STANDARD AGS BRASS TABLET, STAMPED "I-8901", X = 410,237.56, Y = 1,534,092.45, G-G = .9996740
DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510' (SLD 1929)

SURVEY INFORMATION

FIELD NOTES

NO. | BY | DATE

ENGINEER'S SEAL

REMARKS / REVISIONS | BY | DATE

DESIGN — DATE 3/18/02 — DESIGNED BY JPG
DRAWN BY TEP
CHECKED BY RU

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Mechanical / Electrical / Structural Consulting Engineers
6400 Uptown Boulevard, N.E. Suite 505E, Albuquerque, New Mexico 87110
(505) 884-8868 FAX 884-7048

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

BID LOT 5
LOUISIANA BOULEVARD BRIDGE

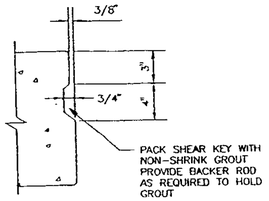
TITLE: LA CUEVA CHANNEL
TYPICAL BRIDGE SECTIONS

DESIGN REVIEW COMMITTEE: APPROVED SEP 12 2002 — REVIEW COMMITTEE
CITY ENGINEER APPROVAL: APPROVED SEP 12 2002 — CITY ENGINEER

LAST DESIGN UPDATE | MO./DAY/YR. | MO./DAY/YR.

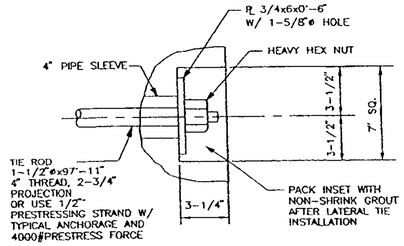
CITY PROJECT NO. 677181
ZONE MAP NO C-19-Z
SHEET OF BL5-3

RECORD DRAWINGS



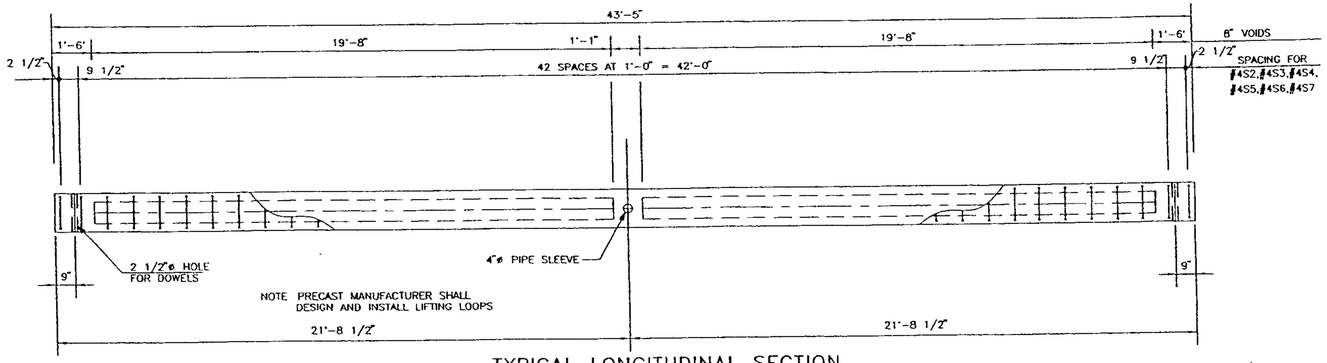
SHEAR KEY DETAIL

SCALE: NONE



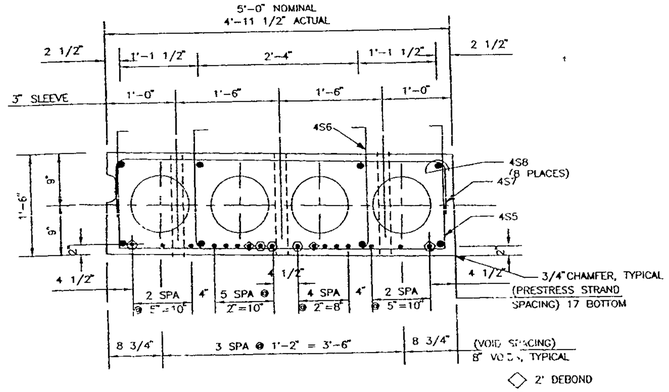
LATERAL TIE AND INSET

SCALE. NONE



TYPICAL LONGITUDINAL SECTION

SCALE: 3/8" = 1'-0"



TYPICAL EXTERIOR BEAM REINF.

SCALE: 1" = 1'-0"

ESTIMATED QUANTITIES FOR ONE EXT. BEAM AND BEAM DATA

BEAM TYPE	CONCRETE	REINFORCING STEEL		EMBEDDED STRUCT. STEEL **	WEIGHT	CAMBER	DEAD LOAD DEFLECTION
		1/2" STRAND	REBAR				
60"	10.1 C.Y.	350 LBS.	840 LBS	120 LBS.	42,000 LBS.	737"	.392"

QUANTITIES ARE FOR EXTERIOR BEAM ONLY AND DO NOT INCLUDE QUANTITIES FOR CONCRETE DECK AND SIDEWALK (4)-REQUIRED

** INCIDENTAL TO CONSTRUCTION

PRESTRESS FORCE (INITAL) = 30,985 #/STRAND
LOSSES = 3040 #/STRAND
Pse = 27,950 #/STRAND

REINFORCING REQUIRED FOR ONE EXT. BEAM

BAR	TYPE	SIZE	LENGTH	NUMBER
4S5	(5)	4	7'-11"	44
4S6	(6)	4	5'-8"	44
4S7	(7)	4	6'-8"	44
4S8	(1)	4	43'-0"	8

DESIGN DATA

CONCRETE.

F'ci = MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT TIME OF INITIAL PRESTRESS = 4500 PSI

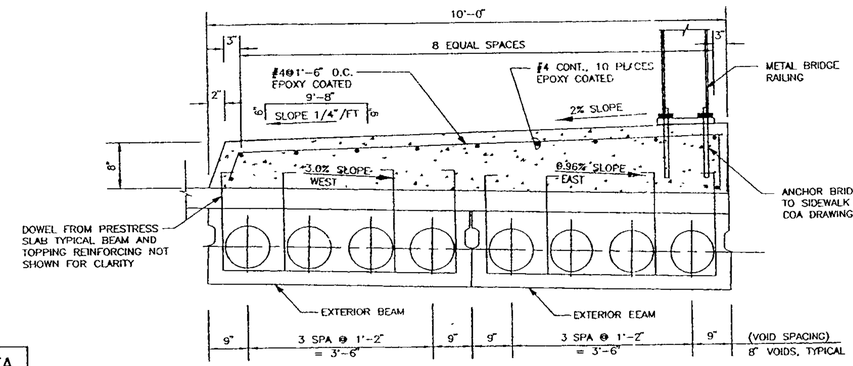
F'c = 5500 PSI

PRESTRESSING STEEL.

-1/2" DIAMETER, SEVEN WIRE, LOW RELAXATION STRANDS
Fy = 270,00 PSI

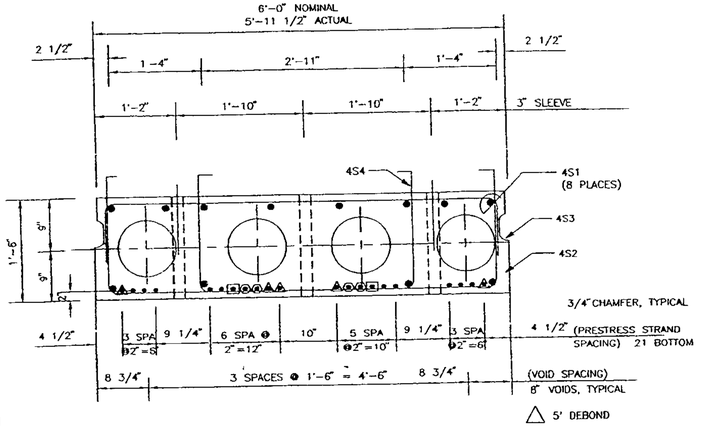
CONVENTIONAL REINFORCING.

Fy = 60,000 PSI (GRADE 60)



TYPICAL SIDEWALK DETAIL

SCALE: 3/4" = 1'-0"



TYPICAL INTERIOR BEAM REINF.

SCALE. 1" = 1'-0"

ESTIMATED QUANTITIES FOR ONE INT. BEAM AND BEAM DATA

BEAM TYPE	CONCRETE	REINFORCING STEEL		EMBEDDED STRUCT. STEEL **	WEIGHT	CAMBER	DEAD LOAD DEFLECTION
		1/2" STRAND	REBAR				
72"	12.5 C.Y.	385 LBS.	920 LBS.	135 LBS.	52,000 LBS	.718"	.390"

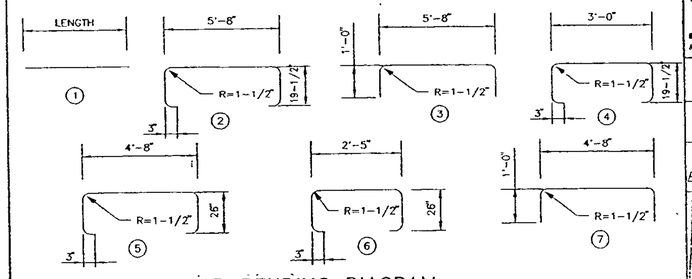
(13)-REQUIRED

** INCIDENTAL TO CONSTRUCTION

PRESTRESS FORCE (INITAL) = 30,985 #/STRAND
LOSSES = 3520 #/STRAND
Pse = 27,460 #/STRAND

REINFORCING REQUIRED FOR ONE INT. BEAM

BAR	TYPE	SIZE	LENGTH	NUMBER
4S1	(1)	4	43'-0"	8
4S2	(2)	4	8'-11"	44
4S3	(3)	4	7'-8"	44
4S4	(4)	4	6'-3"	44



BAR BENDING DIAGRAM

SCALE: NONE

AS BUILT INFORMATION

CONTRACTOR MARKS & CHANGE INFORMATION
STAKED BY CARTER & BURGESS, INC. DATE 7/03
INSPECTORS BY DHT DATE 7/03
FIELD LOCATIONS BY C&B SURVEYS DATE 7/03
FIELD VERIFICATION BY C&B SURVEYS DATE 7/03
DRAWINGS CORRECTED BY SHANNON & GOMEZ DATE 7/03

MICRO-FILM INFORMATION

DATE
RECORDED BY
NO.

BENCH MARKS

"T-820", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD AND LOS ANGELES DR. GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST.; THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE THE STA. IS LOCATED IN THE N.E. QUADRANT

STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "T-820", X = 410,237.56, Y = 1,534,092.46, G-G = .99964740
DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.516' (SLD 1929)

SURVEY INFORMATION

NO	FIELD NOTES	BY	DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS REVISIONS DESIGN	BY	DATE
				3/18/02
				3/18/02
				3/18/02

DESIGNED BY JPG
DRAWN BY TEP
CHECKED BY RJJ

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CME, Inc.
Mechanical / Electrical / Structural Consulting Engineers
8400 Uptown Boulevard, N.E. Suite 505E
Albuquerque, New Mexico 87110
(505) 884-8868
FAX 884-7048

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

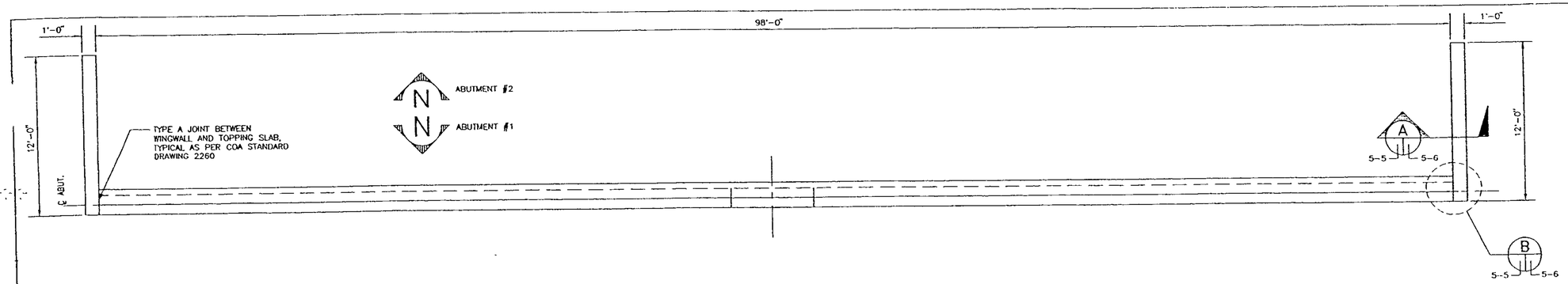
BID LOT 5
LOUISIANA BOULEVARD BRIDGE

TITLE: LA CUEVA CHANNEL
BOX BEAM REINFORCING AND MISC. DETAILS

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR	MO./DAY/YR
APPROVED SEP 12 2002 REVIEW COMMITTEE	APPROVED SEP 12 2002 CITY ENGINEER			

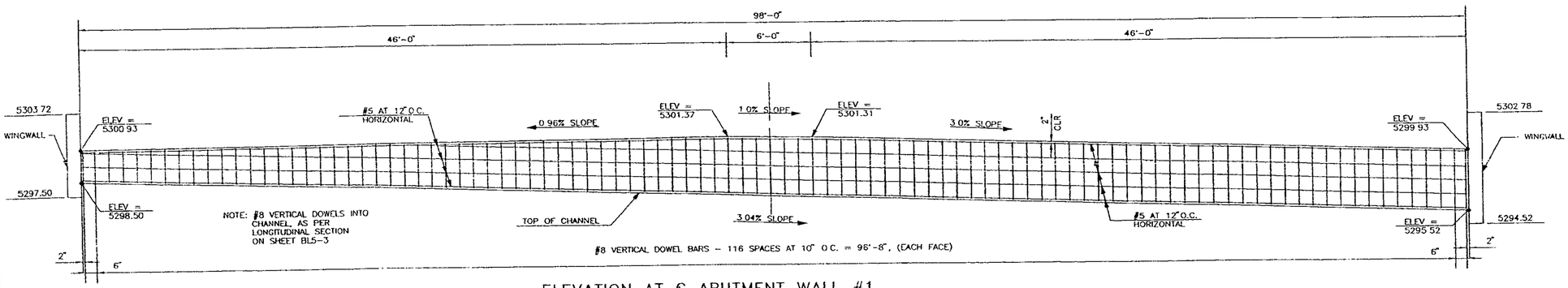
CITY PROJECT NO.	ZONE MAP NO	SHEET OF
677181	C-19-Z	BL5-4

RECORD DRAWINGS



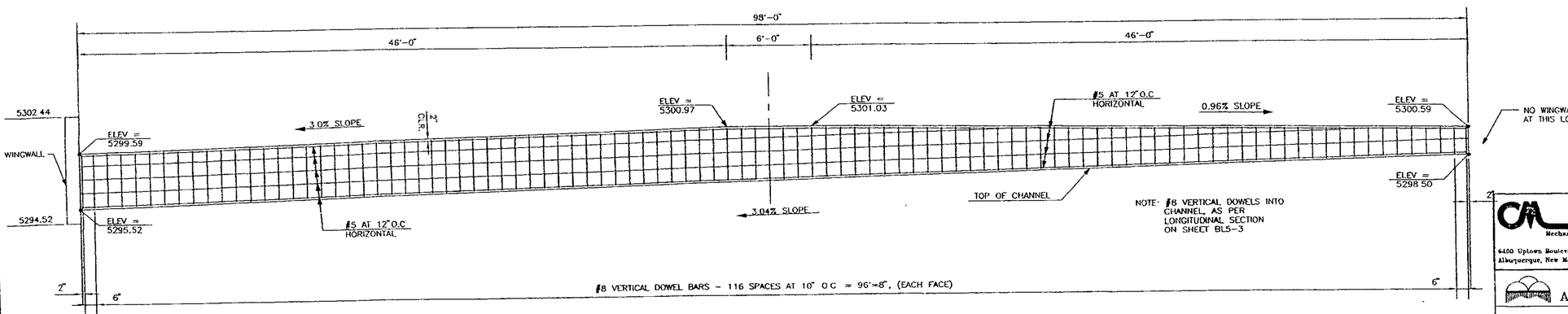
ABUTMENT WALL PLAN VIEW

SCALE: 1/4" = 1'-0"



ELEVATION AT ℄ ABUTMENT WALL #1

SCALE: 1/4" = 1'-0"



ELEVATION AT ℄ ABUTMENT WALL #2

SCALE: 1/4" = 1'-0"

AS BUILT INFORMATION

BENCH MARKS

"I-820", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE, TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST.; THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA IS LOCATED IN THE N.E. QUADRANT STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "I-820", Y = 1,524,082.46, E-W = 9996'40" DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927) ELEVATION = 5474.510' (SLD 1929)

CONTRACTOR: [illegible] CONTRACTORS
CONSTRUCTION STAKING STAKED BY: [illegible] DATE 7/03
FIELD INSPECTION BY: [illegible] DATE 7/03
AS-BUILTS REVISED BY: [illegible] DATE 7/03
MICRO-FILM INFORMATION
DRAWINGS CORRECTED BY: [illegible] DATE 7/03
RECORDED BY DATE
NO

SURVEY INFORMATION

FIELD NOTES

NO.	DATE	BY

ENGINEER'S SEAL

NO.	DATE	REMARKS REVISIONS DESIGN	BY
		DESIGNED BY	JPG
		DRAWN BY	TEP
		CHECKED BY	RJV

DATE 3/18/02
DATE 3/18/02
DATE 3/18/02

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CME, Inc.
Mechanical / Electrical / Structural Consulting Engineers
6400 Uptown Boulevard, N.E. Suite 505E (505) 884-6868
Albuquerque, New Mexico 87110 FAX 884-7048

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

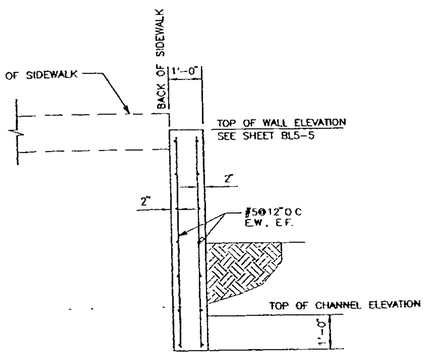
BID LOT 5
LOUISIANA BOULEVARD BRIDGE

TITLE: LA CUEVA CHANNEL
ABUTMENTS NO. 1 AND NO.2 DETAILS

DESIGN REVIEW COMMITTEE: APPROVED SEP 12 2002 DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL: APPROVED SEP 12 2002 CITY ENGINEER

LAST DESIGN UPDATE	MO/DAY/YR	MO/DAY/YR

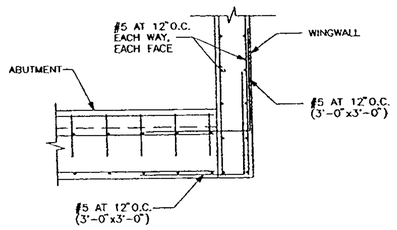
CITY PROJECT NO. 677181 | ZONE MAP NO. C-19-Z | SHEET OF BL5-5



SECTION AT WINGWALL (A)

SCALE: 1/2" = 1'-0"

5-5 5-6



CORNER DETAIL AT WINGWALL (B)

SCALE: 1/2" = 1'-0"

5-5 5-6

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

BENCH MARKS

71-B20: THE STATION IS LOCATED 9 MILES W. E. OF DOWNTOWN ALBUQUERQUE TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST. THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT

STATION MARK IS A STANDARD NGS BRASS TABLET, STAMPED 71-B20. X = 410,237.56, Y = 1,524,092.46, 0-0 - 99844740

DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)

ELEVATION = 5474.510' (GLD 1929)

AS BUILT INFORMATION

CONTRACTOR MADE + CHANGES INDICATED

WORK STAKED BY CONTRACTOR DATE 1/03

SURVEYED BY CONTRACTOR DATE 1/03

ACCEPTANCE BY CITY DATE 7/03

VERIFICATION BY SURVEY DEPT. DATE 7/03

CHANGES BY CONTRACTOR DATE 1/03

MICRO-FILM INFORMATION

RECORDED BY DATE

NO

ENGINEER'S SEAL

NO.	DATE	REMARKS
		REVISIONS
		DESIGN

DESIGNED BY	JPG	3/18/02
DRAWN BY	TEP	3/18/02
CHECKED BY	RIU	3/18/02

101533

CMC, Inc.

Mechanical / Electrical / Structural Consulting Engineers

6400 Uptown Boulevard, N.E. Suite 505E
Albuquerque, New Mexico 87110

(505) 884-8868
FAX 884-7048

ALBUQUERQUE METROPOLITAN
ARROYO FLOOD CONTROL AUTHORITY

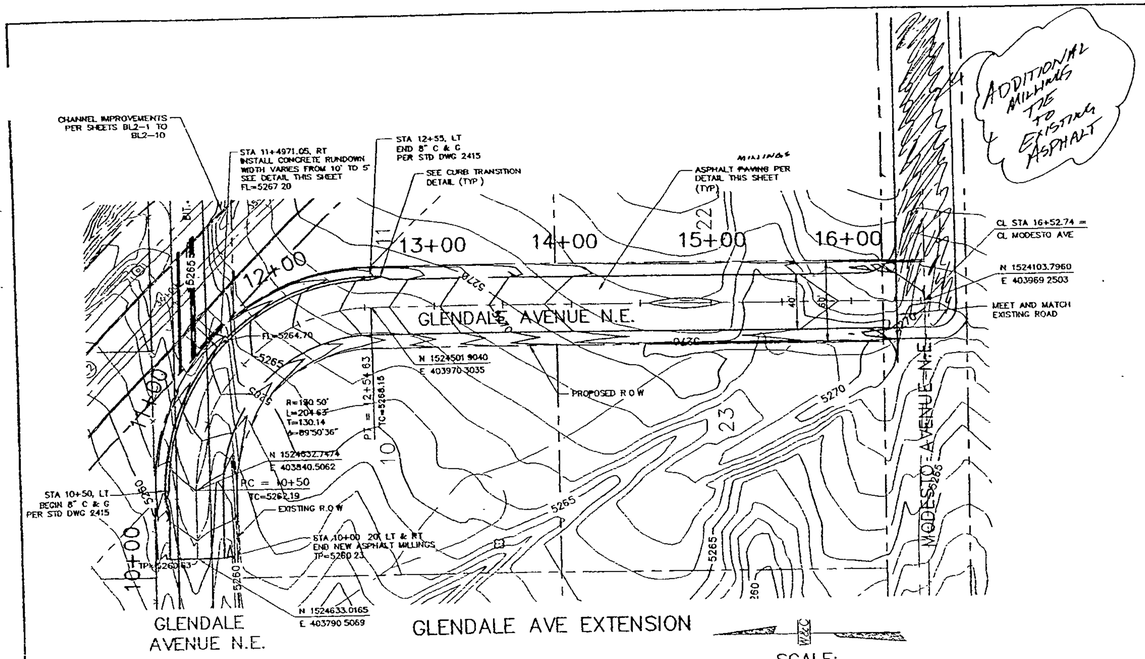
BID LOT 5
LOUISIANA BOULEVARD BRIDGE

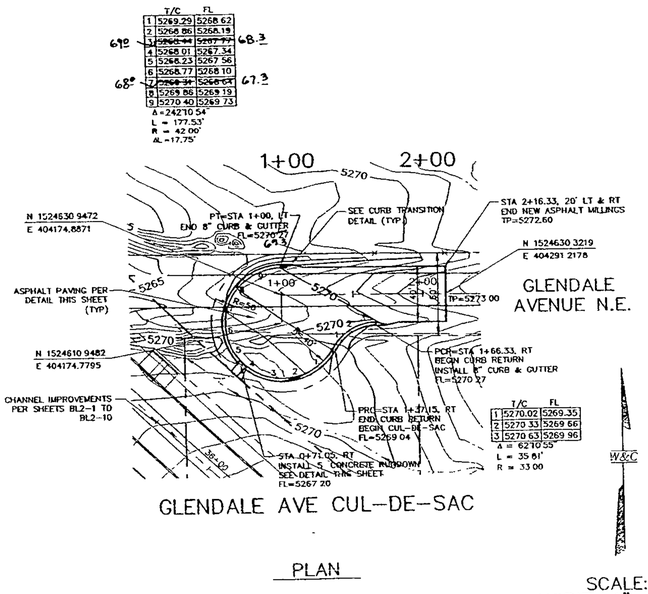
TITLE: LA CUEVA CHANNEL
MISCELLANEOUS DETAILS

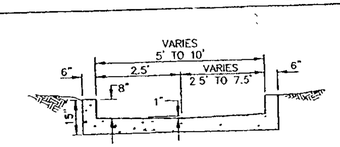
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	NO./DAY/YR.
APPROVED SEP 12 2002 DESIGN REVIEW COMMITTEE	APPROVED SEP 12 2002 CITY ENGINEER			

CITY PROJECT NO. 677181 | ZONE MAP NO C-19-Z | SHEET BL5-6 OF

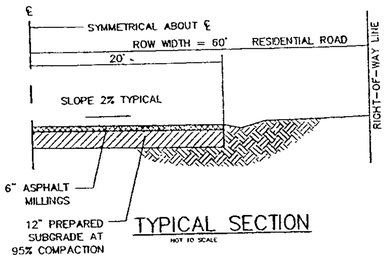
RECORD DRAWINGS



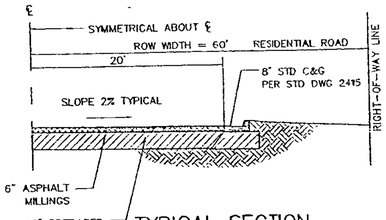




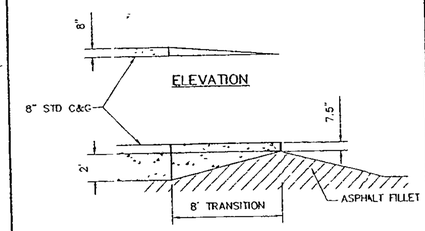
CONCRETE RUNDOWN DETAIL
SCALE 1" = 2



TYPICAL SECTION
NOT TO SCALE

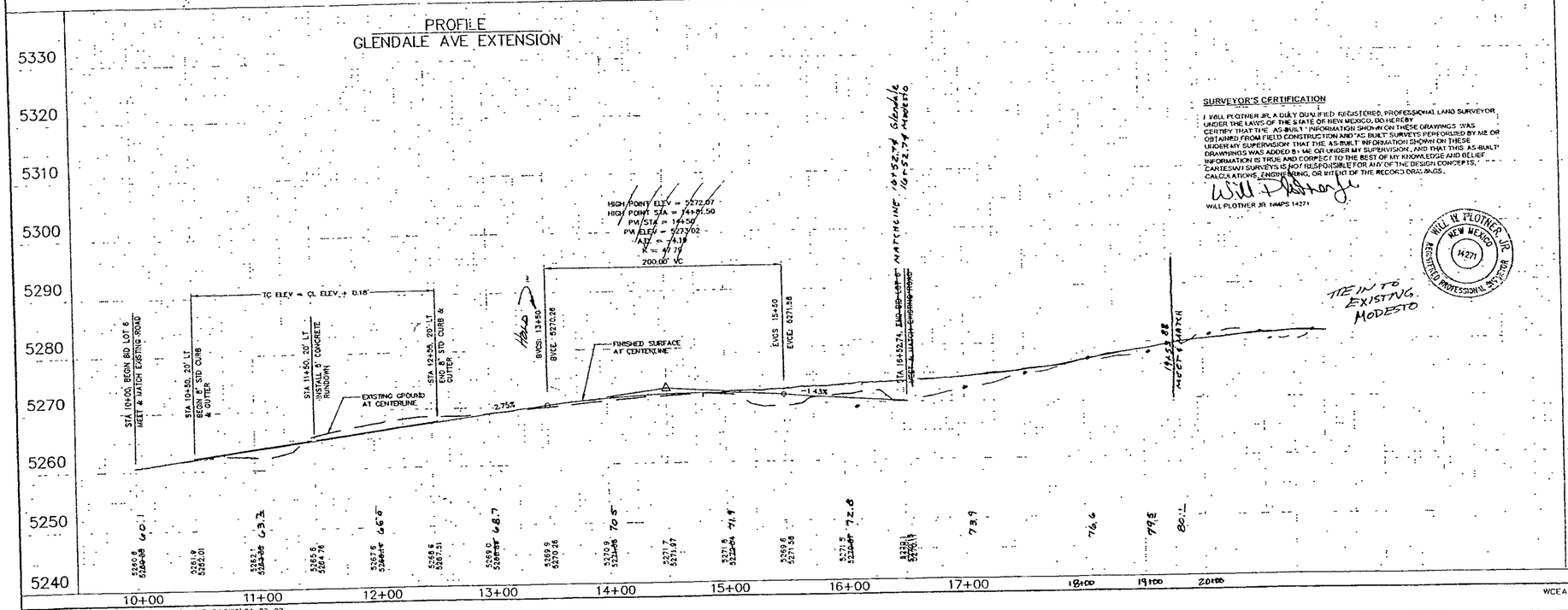


TYPICAL SECTION
NOT TO SCALE
STA 10+50 TO STA 12+55



PLAN

CURB TRANSITION DETAIL
NOT TO SCALE



SURVEYOR'S CERTIFICATION

I WILL PLOTNER JR, A DULY QUALIFIED REGISTERED, PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND "AS BUILT" SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION, AND THAT THIS AS-BUILT INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. DARDEEN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS, CALCULATIONS, ENGINEERING, OR INTENT OF THE RECORD DRAWINGS.

WILL PLOTNER JR NMPS 14271

WILL N. PLOTNER JR. NEW MEXICO 14271 REGISTERED PROFESSIONAL SURVEYOR

AS-BUILT INFORMATION

CONTRACTOR: Moore & Lovart Contractors — DATE: 7/02
ENGR: CARDENAS — DATE: 7/02
SURVEYOR: S. CARDENAS — DATE: 7/02
STAKED BY: S. CARDENAS — DATE: 7/02
INSPECTOR: DAVE HUTCH — DATE: 7/03
CONNECTED BY: DAVE HUTCH — DATE: 7/03

MICRO-FILM INFORMATION

RECORDED BY: DATE: NO:

BENCH MARKS

A STANDARD ACS BRASS TABLET, STAMPED "1-B20" LOCATED IN THE NE QUAD OF THE INTERSECTION OF BARSTOW ST NE AND MODESTO AVE NE. N=1,524,092.46, E=1,010,237.56, ELEV=5474.510' (NGVD 1929)
G-GPS B9984740, 2003/10/23", CENTRAL ZONE, (NAD 1927), ELEV=5474.510' (NGVD 1929)

SURVEY INFORMATION

NO.	DATE	BY

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD S.E.
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 898-6021

BID LOT 6
GLENDALE EXTENSION

GLENDALE ROAD
IMPROVEMENT PLAN & PROFILE

REVISIONS	NO	DATE	REMARKS	BY

L. BRADLEY HILLIS NEW MEXICO 14096 REGISTERED PROFESSIONAL ENGINEER

DESIGN	JDV	WCEA NO	X1218035	DATE	MAR 2002
DRAWN	JLB	PROJECT NO	677181	SHEET NO	BL6-1
CHECK	DSA				

WCEA #X1218035
MAR 2002

I:\P_X1218035\X10218035-R\M\SHEETS\8'35PNP4.DWG\04-02-02

RECORD DRAWINGS

DELINEATORS (B-1AL-8)
20' APART ON CENTER
2' OFFSET FROM EDGE OF CURB

TYPE III BARRICADES
DEAD END
20' APART ON CENTER
2' OFFSET FROM
EDGE OF CURB

2' OFFSET FROM EDGE OF CURB
FOR ALL SIGNS

R2-1
15 MPH

W14-1

200'

100'

6' CROSSWALK

STOP LINE
OFFSET 4' FROM CROSSWALK

1+00

2+00

3+00

36'

R1-1

LOUISIANA BLVD.

W&C

TIE TO EXISTING

GLENDALE CUL-DE-SAC

INSTALL MILLINGS

INSTALL VERTICAL PANELS

6' CROSSWALK

2' OFFSET FROM EDGE OF CURB
FOR ALL SIGNS

W1-1L
W13-1

125'

DELINEATORS - B-1AL-8
20' APART ON CENTER
2' OFFSET FROM EDGE OF CURB

DELINEATORS - B-1AR-8
20' APART ON CENTER
2' OFFSET FROM EDGE OF CURB

34+00

12+00

13+00

14+00

15+00

16+00

16+52.74

STOP LINE
OFFSET 4' FROM CROSSWALK

INSTALL VERTICAL PANELS

R1-1

PT = 12+54.63

11+00

W1-8R
20' APART ON CENTER
2' OFFSET FROM EDGE OF CURB

PC = 10+50

10+00

125'

MODESTO AVENUE NE

GLENDALE AVENUE NE

GLENDALE EXTENSION

W1-1R
W13-1

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft

W14-1
DEAD END
30" X 30"

R11-4
ROAD CLOSED
TO THRU TRAFFIC
60" X 30"

W1-8R
CHEVRON
18" X 24"

W1-1L
LEFT TURN SIGN
30" X 30"

W1-1R
RIGHT TURN SIGN
30" X 30"

W1-8L
CHEVRON
18" X 24"

R2-1
SPEED LIMIT SIGN
24" X 30"

R1-1
STOP SIGN
30" X 30"

W13-1
ADVISORY
SPEED PLATE
18" X 18"

TYPE III BARRICADE
12' WIDE
5' HIGH

TYPE III BARRICADE
WITH W1-6R
12' WIDE
5' HIGH

TYPE III BARRICADE
WITH W1-6L
12' WIDE
5' HIGH

VERTICAL PANEL
B-1aL-8
B-1aR-8

WCEA #X1218035
FEB 2002

AS-BUILT INFORMATION
CONTRACTOR MOORE & LEUART CONTRACTORS DATE 7/03
VERIFIED BY CASTERLINE DATE 7/03
FIELD LOCATION BY CASTERLINE DATE 7/03
COMPLETED BY LEUART DATE 7/03

MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
A STANDARD ACS BRASS TABLET, STAMPED "1-820" LOCATED IN THE NE QUAD OF THE INTERSECTION OF BASSTOW ST NE AND MODESTO AVE NE. N=1,410,237.55, E=1,524,092.46, (NAD 1927) ELEV=5074.510' (USD 1929)
G-G=0.99984740, a=-0°10'23" CENTRAL ZONE, (NAD 1927)

SURVEY INFORMATION
DATE
BY
NO.

ALBUQUERQUE METROPOLITAN
ARROYO FLOOD CONTROL
AUTHORITY

WILSON & COMPANY
2600 THE AMERICAN ROAD S.E
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 896-8021

BID LOT 6
LA CUEVA CHANNEL

GLENDALE ROAD
PERMANENT SIGNING PLAN

REVISIONS

NO	DATE	REMARKS	BY

DESIGN	JDV	WCEA NO. X1218035	DATE MAR 2002
DRAWN	JLB	PROJECT NO. 677181	SHEET NO BL6-2
CHECK	DSA		

3/18/02

I:\Projects\X1218035\1218035-Panels\Sheets\81251C.dgn 03-18-02

10+75.02 CL SD, NEW 108" RCP OUTFALL = 67+13.82, 35.99' LT, LA CUEVA CHANNEL, INV= 61.63 ±1'

20+03.34 CL
1 - 108" 45° BEND

20+88.65 CL
1 - 108" 45° BEND

20+98.31 CL, NEW SD MH #27
1 - 9' X 4' TEE W/ RISER
RIM = 75.20

22+00.92 CL, NEW SD MH #26
1 - 9' X 4' TEE W/ RISER
RIM = 77.32

22+10.79 CL
1 - 108" 45° BEND

22+38.10 CL
1 - 108" 45° BEND

24+93.58 CL
1 - 108" 45° BEND

24+78.08 3.93 LT
EXISTING 10" GATE VALVE
TP = 86.60

PRC 24+06.95 CL

PT 20+00.00, CL = 10+60.00 CL(E)

EXISTING EDGE OF PAVEMENT

TEMPORARY PAVEMENT CONSTRUCTED WITH DESERT RIDGE TRAILS CONSTRUCTION

25+27.97 CL WYOMING BLVD. N.E. = 10+00.00 CL MODESTO AVE. N. E.

25+25.91, 19.49' RT, EXIST. SAS MH
RIM = 91.38
REMOVE EXIST. MANHOLE AND REPLACE WITH NEW DROP MANHOLE

MODESTO AVENUE NE

TRACT 2, UNIT 3

PINON VISTA COURT NE

30' PUBLIC DRAINAGE AND PRIVATE LANDSCAPING EASEMENT

EXISTING 30' PUBLIC ACCESS AND UTILITY EASEMENT

BLOCK 7

25+11.44, CL, NEW SD MH #25
1 - 8' X 9' REDUCER
1 - 8' X 4' TEE W/ RISER
RIM = 91.44 ±0.5'

25+37.98, 0.03' RT
EXISTING 10" CROSS TO BE REMOVED AND REPLACED WITH A 10" TEE
TP = 86.50

25+30.58, CL WL CROSSING

26+18.55 CL 96" STORM DRAIN = 26+18.55, 33.64' RT., WYOMING BOULEVARD N. E.

PT 27+60.99 CL

N 00°00'07" E

N 89°33'05" W

26+16.81, 18.65' RT., NEW SAS MH #61
RIM = 88.87
25+92.74, 22.08' LT *
26+08.89, CL, TURNING POINT
1 - 96° 45° BEND

SEE SHEET BL7-1.1A FOR ACTUAL HORIZONTAL LOCATION

25+89.33 CL SAS CROSSING

8.00 LF 24" RCP AT 3% W/PRECAST PLUG

REMOVE AND DISPOSE PAVEMENT

FUTURE R/W

28+74.78, 45.00' RT
~~FUTURE DOUBLE 24"~~
~~DOUBLE THROAT INLET~~
GRATE = 8483.83 ±
INSTALL MDI
FUTURE 84" RCP

GLENDALE AVENUE NE

SURVEYOR'S CERTIFICATION

I, WILL PLOTNER JR, A DULY QUALIFIED, REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO DO HEREBY CERTIFY THAT THE "AS BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND AS-BUILT SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION. THAT THE AS BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION AND THAT THIS AS-BUILT INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS CALCULATIONS, ENGINEERING OR INTENT OF THE RECORD DRAWINGS

WILL PLOTNER JR NMPS 14271

NEW MEXICO 14271 REGISTERED PROFESSIONAL LAND SURVEYOR

NOTES

1. ALL STATIONING IS CENTERLINE STATIONING OF WYOMING NORTH FROM TURNING POINT, AND CENTERLINE OF STORMDRAIN FROM CHANNEL TO TURNING POINT

2. TRENCH INSTALLATIONS FOR THE 108" AND 96" CLASS III RCP IS BASED ON A TYPE 2 INSTALLATION WITH CATEGORY II SOIL MATERIAL WITH MINIMUM STANDARD PROCTOR COMPACTION OF 95%

FOR ADDITIONAL INFORMATION SEE SHEET BL7-1.1A

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)					
PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
8"	22'	9'	4'	2'	60'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

23+14.36, 10.00 LT
10" T & 8" CROSS RESTRAINED

PC 30+56.88 CL WYOMING BLVD. NE = 23+34.36 CL BLUE CYPRESS AVE. NE

30+56.26, CL WYOMING BLVD. NE= 10+00.00 CL GLENDALE AVE. NE

24+09.36, 10.00 LT
1 - 8" GATE VALVE
1 - "TAPE TO" JACKE BOX
8" CAP
RESTRAINED

31+26.59, 38.80' RT.
INLET - 72" X 24"
INV = 69.90
RIM = 84.14

N 45°19'21" E

BENCH MARKS

"1-820", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.6 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA IS LOCATED IN THE N.E. QUADRANT OF THE INTERSECTION. STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "1-820", X = 410,237.55, Y = 1,524,032.46, C-G = 9996740 DELTA ALPHA = 010°23', CENTRAL ZONE, (NAD 1927) ELEVATION = 5474.510' (SLD 1929)

AS BUILT INFORMATION

CONTRACTOR middle v EQUIPT. (CONTRACTOR) DATE 6/03
SURVEYED BY Cartesian Surveys DATE 6/03
INSPECTED BY BHT
FIELD LOCATIONS BY CARTESIAN DATE 6/03
DRAWINGS COMPILED BY CARTESIAN DATE 6/03
CORRECTIONS BY ENGINEER DATE
MICRO-FILM INFORMATION
RECORDED BY
NO

SURVEY INFORMATION

NO	DATE	BY	FIELD NOTES

SCALE: 1" = 50'
WYOMING BOULEVARD NE
96" STORM DRAIN
STA. 19+71.37 TO STA. 31+25.47
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'

BY OTHERS	THIS PROJECT
10.00 LF 8" PVC SAS, SLOPE = 0.80%	85.00 LF 8" PVC SAS, SLOPE = 0.80%
384.36 LF 10" PVC SAS, SLOPE = 2.40%	

123.29 LF 108" RCP, SLOPE = 1.0%, Q = 911 cfs, V = 16.09 f/s

102.61 LF 108" RCP, SLOPE = 1.0%, Q = 911 cfs, V = 14.79 f/s

310.52 LF 108" RCP, SLOPE = 1.0%, Q = 911 cfs, V = 14.79 f/s

107.11 LF 96" RCP, SLOPE = 1.0%, Q = 911 cfs, V = 18.13 f/s

245.25 LF 96" RCP, SLOPE = 1.0%, Q = 911 cfs, V = 18.13 f/s

279.23 LF 96" RCP, SLOPE = 1.0%, Q = 911 cfs, V = 18.13 f/s

FUTURE 11.55 LF 24" RCP, SLOPE = 3.0%

440 LF NEW 12" PVC SAS, SLOPE = -0.69%

90.55 LF PVC 12" SAS, SLOPE = -0.8%

NEW GRADE AT CENTERLINE OF PIPE

NEW FLOWLINE(LEFT)

FUTURE FLOWLINE(RIGHT)

EXISTING GRADE AT RT FLOWLINE

HGL

NEW 12" SAS

NEW 10" WL

NEW 8" WL

NEW 8" SAS

NEW 12" SANITARY SEWER AND 10" WATERLINE TO BE CONSTRUCTED WITH DESERT RIDGE TRAILS SUBDIVISION CONSTRUCTION

BLUE CYPRESS AVE. NE WATERLINE & SANITARY SEWER

19+00	20+00	21+00	22+00
23+00	24+00	25+00	26+00
27+00	28+00	29+00	30+00
31+00			

5400	5390	5380	5370
5360	5350		

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

NO	DATE	REMARKS
1	5-6-02	MODED WATER/SAS AT BLUE CYPRESS AVE

REVISIONS

DESIGNED BY	GJK	DATE 07/01
DRAWN BY	MJR	DATE 07/01
CHECKED BY	DMG	DATE 07/01

ENGINEER'S SEAL

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

BID LOT 7
EL CAMINO DIVERSION STORMDRAIN

TITLE 96" STORMDRAIN PLAN & PROFILE STA. 19+71.37 TO 31+25.47

DRAINAGE REVIEW COMMITTEE — SEP 12 2002

CITY ENGINEER APPROVAL — SEP 12 2002 — CITY ENGINEER

LAST DESIGN UPDATE	MO./DAY/YR	INIT/DAY/YR

CITY PROJECT NO 677181 | ZONE MAP NO. C-19-Z | SHEET BL7-1.1

A00129WP\CHANNEL\BL7-11\04-11-02\MJR RDO

F:\A00\pbs\A0129W BL\BL7-11.dwg, 05/06/02 05:35:01 PM, PLOTTED BY RDO

RECORD DRAWINGS

NOTES

1. ALL STATIONING IS CENTERLINE STATIONING OF WYOMING NORTH FROM TURNING POINT, AND CENTERLINE OF STORMDRAIN FROM CHANNEL TO TURNING POINT.

2. TRENCH INSTALLATIONS FOR THE 108" AND 96" CLASS III RCP IS BASED ON A TYPE 2 INSTALLATION WITH CATEGORY II SOIL MATERIAL WITH MINIMUM STANDARD PROCTOR COMPACTION OF 95%

SURVEYOR'S CERTIFICATION

I, WILL PLOTHER JR, A DULY QUALIFIED, REGISTERED, PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO DO HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND "AS BUILT" SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION. THAT THE "AS-BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION, AND THAT THIS AS BUILT INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS CALCULATIONS, ENGINEERING OR INTENT OF THE RECORD DRAWINGS

Will Plother Jr.

WILL PLOTHER JR. NMPS 14271

WILL N. PLOTHER, JR. NEW MEXICO 14271 REGISTERED PROFESSIONAL SURVEYOR

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT)					
PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
8"	22'	9'	4'	2'	60'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

SCALE: 1" = 50'

WYOMING BOULEVARD NE
96" STORM DRAIN
STA. 194+71.37 TO STA. 314+25.47
SCALE: HORZ. 1" = 50'
VERT 1" = 10'

AS BUILT INFORMATION
CONTRACTOR: PARKER & VINNAT CONTRACTING — DATE: 11/03
CONST. STAKED BY: SURVEYS, INC. — DATE: 6/03
AS-BUILT SURVEY PERFORMANCE BY: CJK — DATE: 6/03
FIELD LOCATION BY: SURVEYS, INC. — DATE: 6/03
DRAWINGS CORRECTED BY: CARTESIAN SURVEYS, INC. — DATE: 6/03
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
"I-B20", THE STATION IS LOCATED 9 MILES N.E. OF DOWNTOWN ALBUQUERQUE, TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT STATION MARK IS A STANDARD AGS BRASS TABLET, STAMPED "I-B20", X = 410,237.56, Y = 1,524,092.48, C-C = 99956740
DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510' (SEA LEVEL DATUM OF 1929)

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

ENGINEER'S SEAL
JAMES C. KELLY
NEW MEXICO
11991
REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS
1	10-1-03	MODIFIED 96" RCP TO THE WEST
2	10-1-02	MOVED WATER & SAS CROSSING
3	5-6-03	ADDED WATER/SAS AT BLUE CYPRESS AVE

REVISIONS — BY: CJK, CJK, CJK

DESIGN — DESIGNED BY: GJK — DATE: 07/01
DRAWN BY: MJR — DATE: 07/01
CHECKED BY: DMG — DATE: 07/01

dmg
MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

BID LOT 7
EL CAMINO DIVERSION STORMDRAIN

TITLE: 96" STORMDRAIN PLAN & PROFILE STA. 194+71.37 TO 314+25.47

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

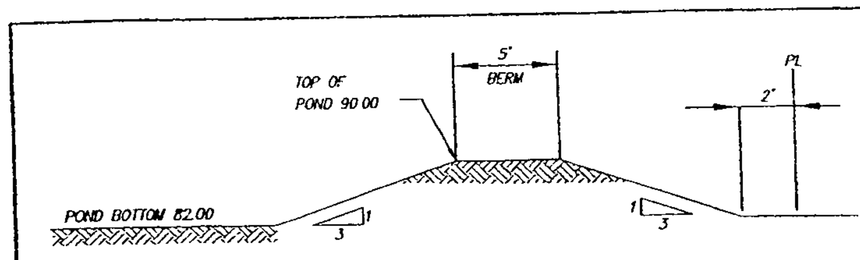
CITY PROJECT NO. 677181 | ZONE MAP NO C-19-Z | SHEET BL7-1.1

A00129WP\CHANNEL\BL7-1.1\10-3-02\MJR RDD CJK

A

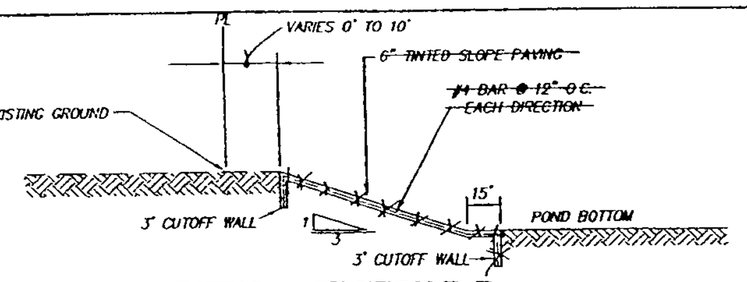
RECORD DRAWINGS

NOTE: SEE SHEET BL7-4 FOR STRUCTURAL DETAILS.



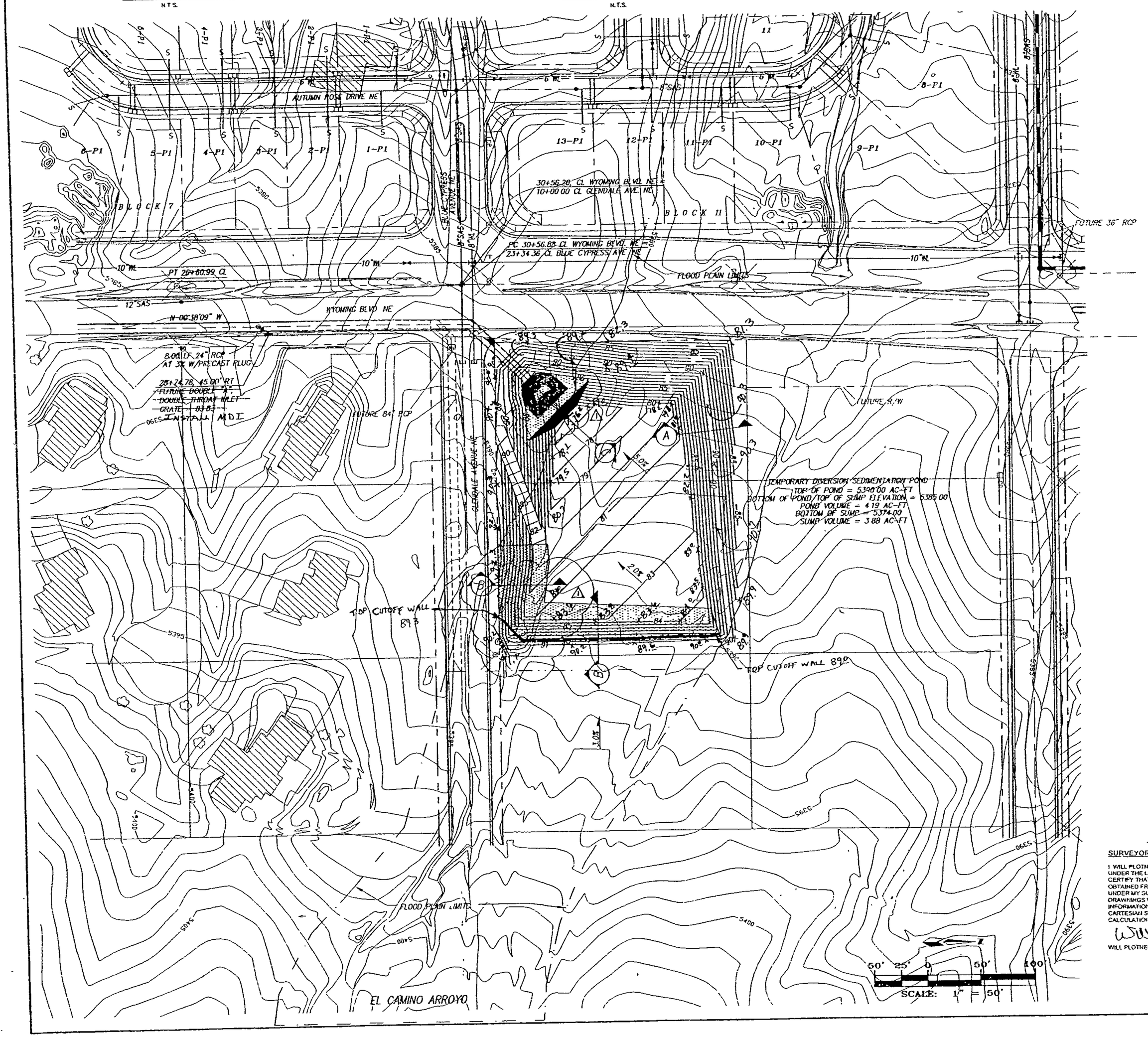
POND DETAIL - SECTION A-A

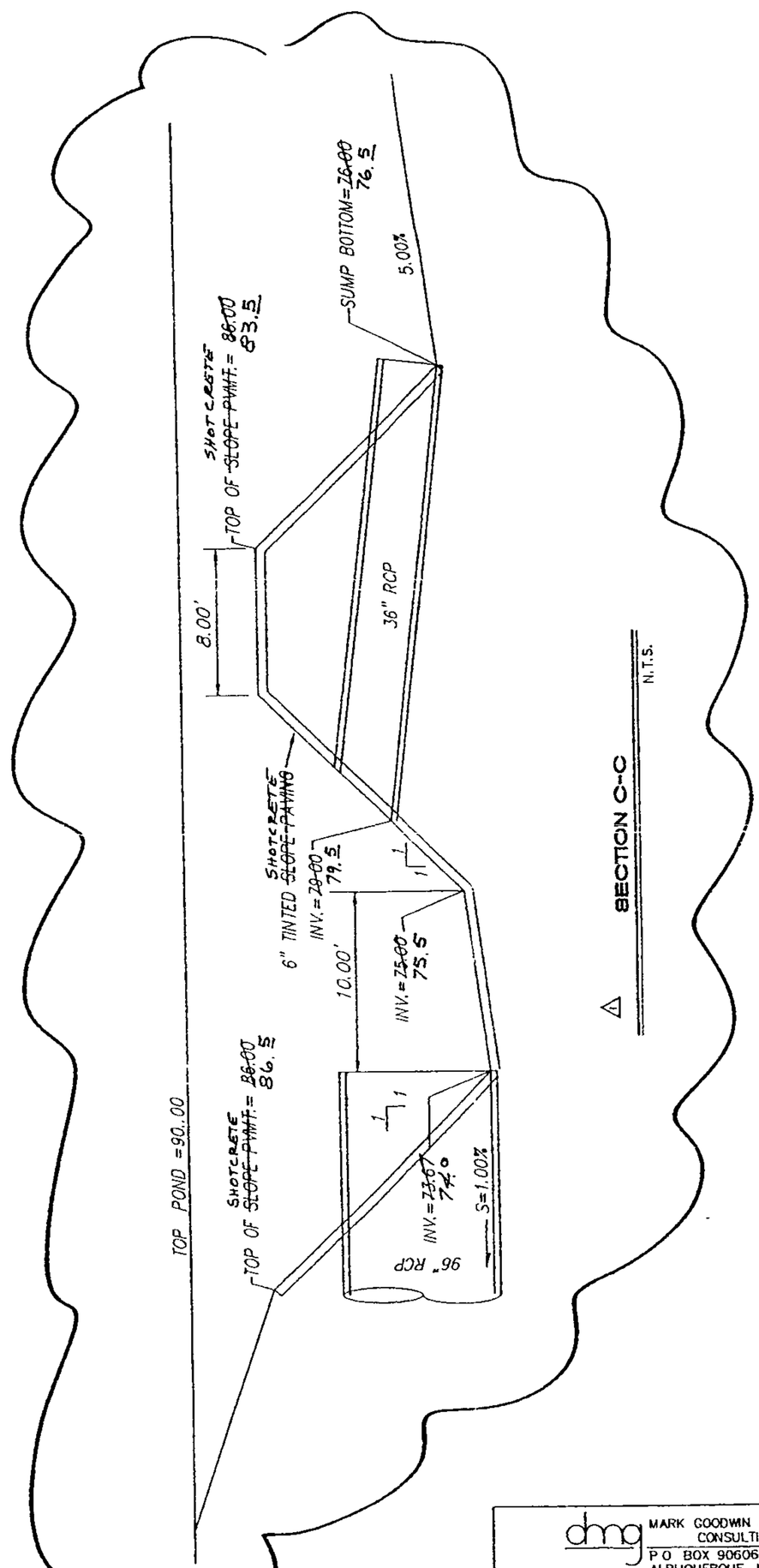
N.T.S.



POND DETAIL - SECTION B-B

N.T.S.





SECTION C-C

N.T.S.

SURVEY INFORMATION

BENCH MARKS

"I-830", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR 1.0 MILE TO BARSTOW ST. THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT.

STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "I-830", Y = 410,237.56, Y = 1,524,092.46, G-G = .99984740

DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)

ELEVATION = 5474.510' (SLD 1929)

FIELD NOTES

NO	BY	DATE

AS BUILT INFORMATION

CONTRACTOR MARK I. GOODWIN & ASSOCIATES, P.A. DATE 6/03

WORK INSPECTED BY CARLSBAD ENG. DEPT. DATE 6/03

INSPECTOR'S SIGNATURE BJT DATE 6/03

ACCEPTANCE BY CARLSBAD ENG. DEPT. DATE 6/03

VERIFICATION BY SURVEYS DATE 6/03

VERIFICATION BY ENGINEERS DATE 6/03

CORRECTED BY SURVEYS DATE 6/03

MICRO-FILM INFORMATION

RECORDED BY

NO DATE

ENGINEER'S SEAL

NO	DATE	REMARKS	BY
1	5-6-02	REVISED POND ENTRANCE & OUTFALL	GJK

REVISIONS

	DATE
DESIGN	08/01
DESIGNED BY GJK	08/01
DRAWN BY MJR	08/01
CHECKED BY DMG	DATE

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-1539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

BID LOT 7
EL CAMINO DIVERSION STORMDRAIN

TITLE
DIVERSION POND PLAN & DETAILS

SURVEYOR'S CERTIFICATION

I WILL PLOTNER JR, A DULY QUALIFIED REGISTERED, PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND AS-BUILT SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION. THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION AND THAT THIS AS-BUILT INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. CARLSBAD SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS, CALCULATIONS, ENGINEERING OR INTENT OF THE RECORD DRAWINGS

Will Plotner Jr.

WILL PLOTNER JR, N. MEX. 14271

NEW MEXICO 14271 REGISTERED PROFESSIONAL SURVEYOR

CITY PROJECT NO	ZONE MAP NO	SHEET
677181	C-19-Z	BL7-2.1

CITY ENGINEER'S APPROVAL: SEP 12 2002

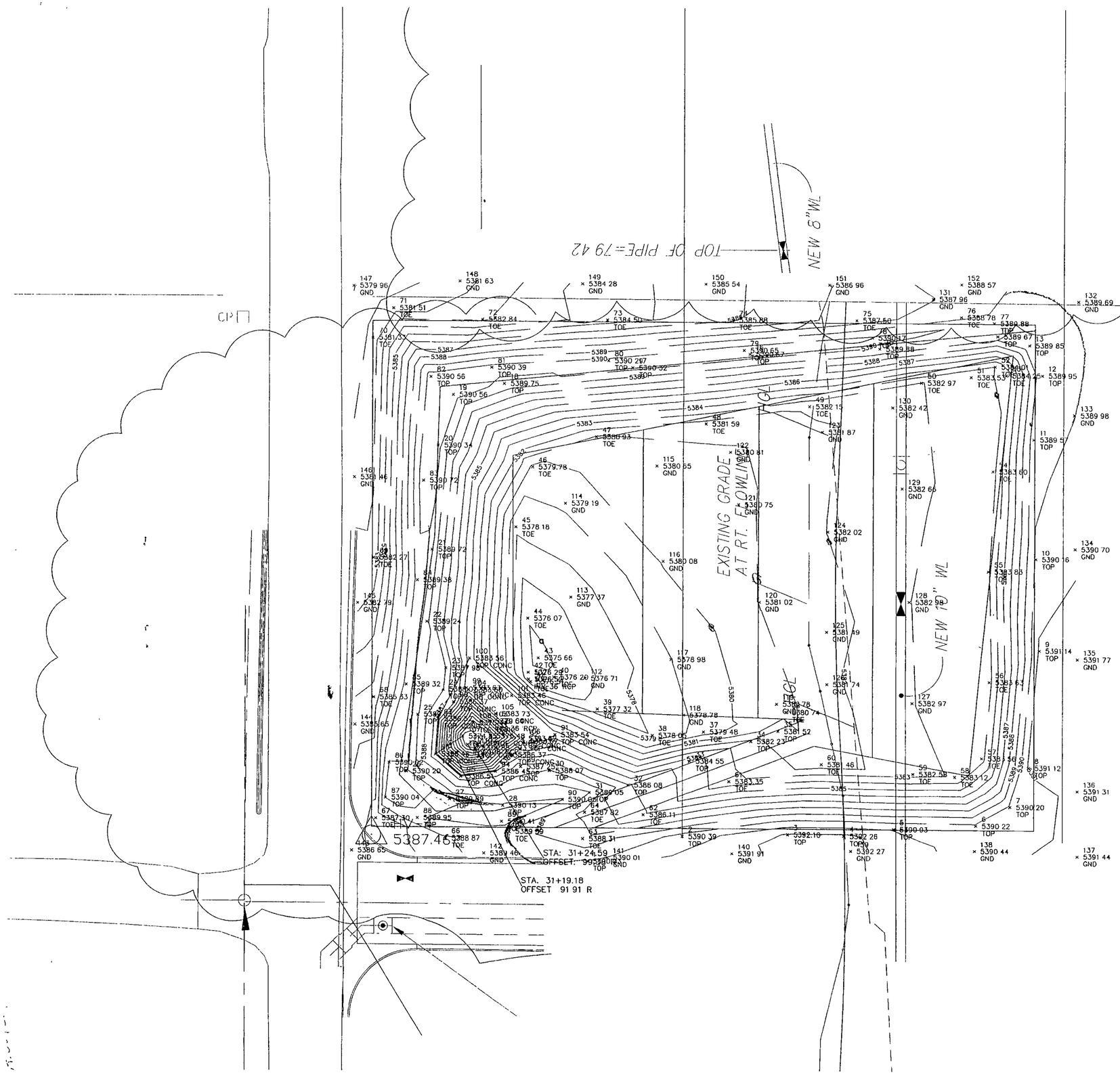
CITY ENGINEER: SEP 12 2002

LAST DESIGN UPDATE

NO	DATE/YR	NO	DATE/YR

A00129WP\ CHANNEL\BL7-2.1\05-06-02\MJR GJK RDO

F:\A00\obs\A0129WP\ \BL7-2.1.dwg, 05/06/02 05:41:53 PM, PLOTTED BY RDO



POND-2 Version 4 01
S/N 88020607

9-26-03 JAH

AS-BUILT POND VOLUME CALCULATIONS

Note: 1. Top of Dam is at elev 89.20
2. Rapid Sediment Volume is 380cu ft (ca. 100 + (5 x Amud) = 2 5cu ft (5 x 0.26sq ft) = 380cu ft)
3. Crest of outlet weir is at elev 83.50

CALCULATED 09-25-2003 09 54 56
DISK FILE G.CAMINO VOL

Planimeter scale 1 inch = 1 ft

Elevation (ft)	Planimeter (sq in)	Area (acres)	A1+A2+sqr(A1*A2) (acres)	Volume (acre-ft)	Volume Sum (acre-ft)
76 00	98 92	0 00	0 00	0.00	0 00
80 00	8,372 51	0 19	0.22	0 29	0 29
81 00	14,481 81	0.33	0 78	0.26	0 55
82 00	20,879 76	0.48	1 21	0 40	0 95
83 00	28,335.32	0 65	1 69	0 56	1.51
83.50	*I*	0 74	2 08	0 35	1 86
84 00	36,349 99	0 83	2.22	0 74	2 25
85 75	*I*	0 94	2 66	1 55	3 80
89 00	49,734 27	1.14	2.95	4 92	7 17
89 20	*I*	1.16	3 46	0 23	7 40
90 00	54,283 85	1 25	3 58	1 19	8 37

I -- > Interpolated area from closest two planimeter readings

$IA = (sq\ rt(Area1) + ((El-E1)/(E2-E1))*(sq\ rt(Area2)-sq\ rt(Area1)))^2$

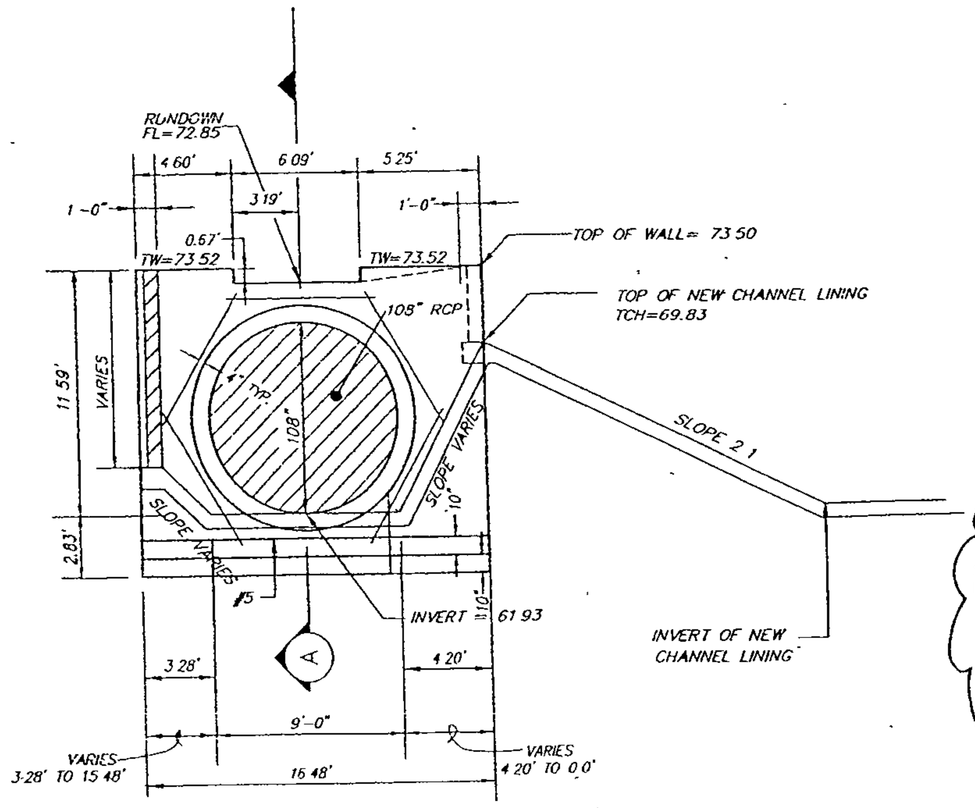
where El, E2 = Closest two elevations with planimeter data
El = Elevation at which to interpolate area
Area1,Area2 = Areas computed for E1, E2, respectively
IA = Interpolated area for El

* Incremental volume computed by the Conic Method for Reservoir Volumes

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq rt (Area1*Area2))

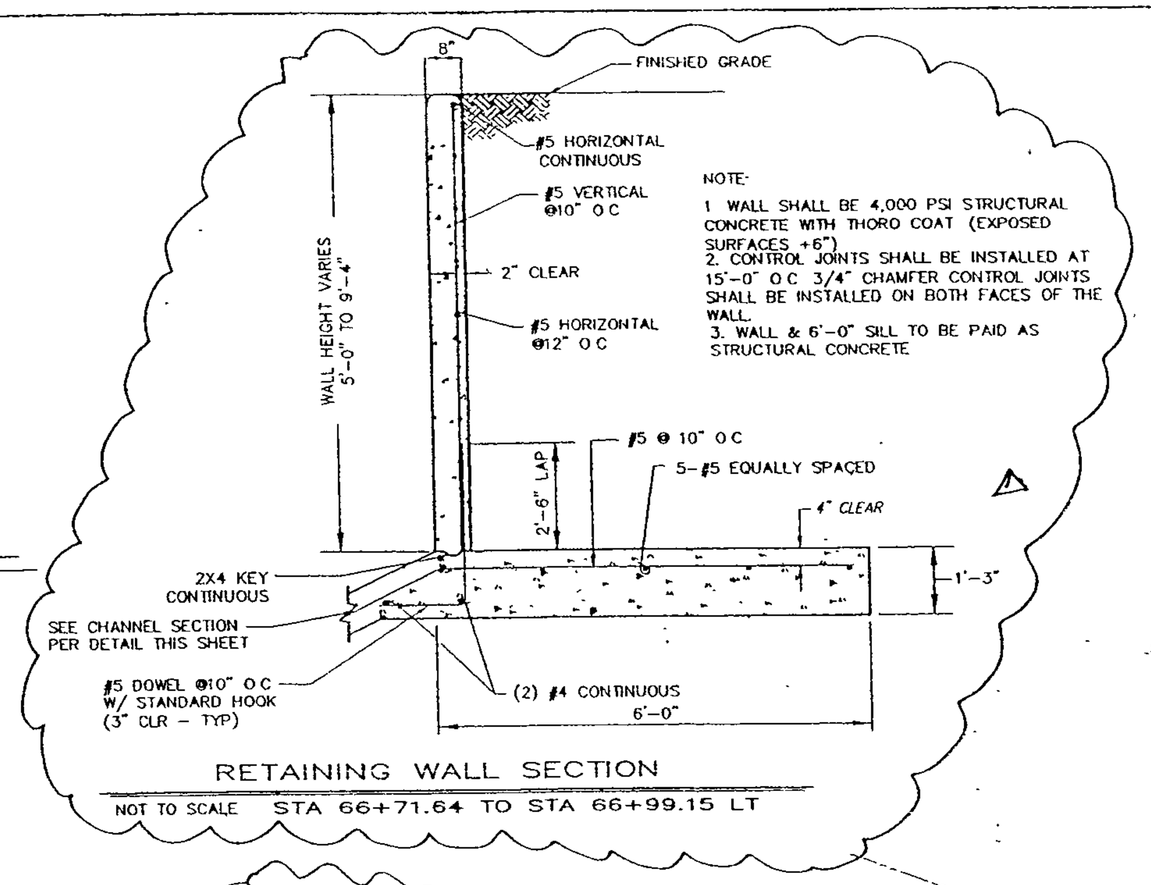
where EL1, EL2 = Lower and upper elevations of the increment
Area1,Area2 = Areas computed for EL1, EL2, respectively
Volume = Incremental volume between EL1 and EL2

RECORD DRAWINGS



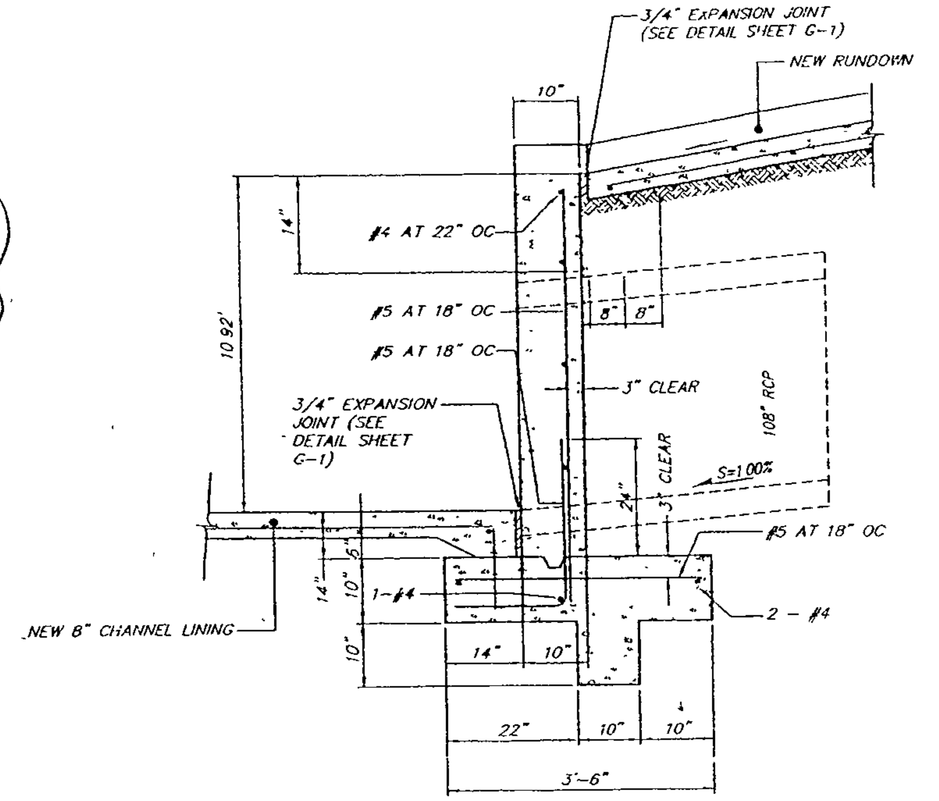
108" INLET FACE DETAIL

SCALE: 1"=5'



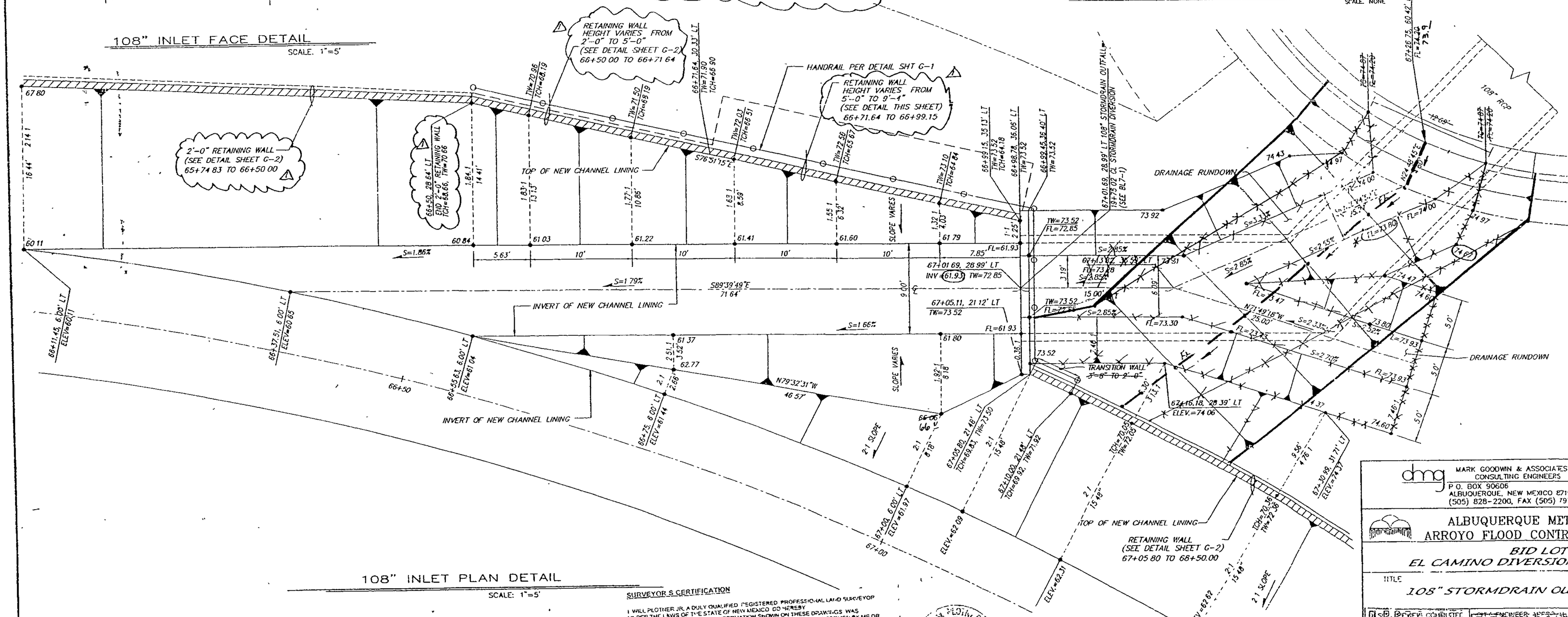
RETAINING WALL SECTION

NOT TO SCALE STA 66+71.64 TO STA 66+99.15 LT

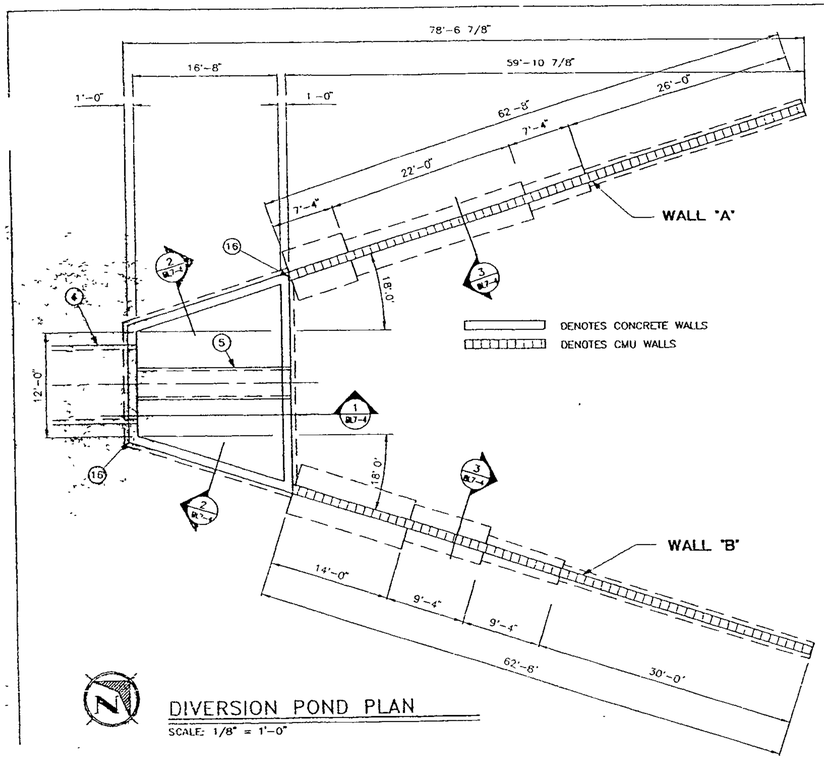


HEADWALL TYPICAL SECTION A-A

SCALE: NONE

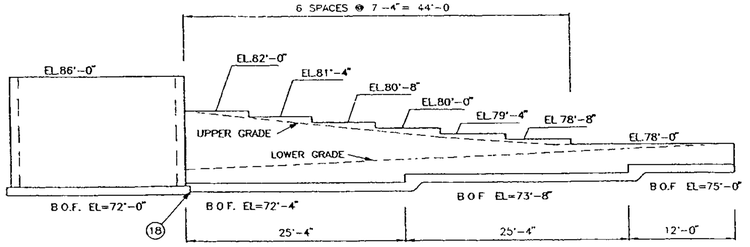

RETAINING WALL HEIGHT VARIES FROM 2'-0" TO 5'-0" (SEE DETAIL SHEET G-2) 66+50.00 TO 66+71.64
HANDRAIL PER DETAIL SHT G-1
RETAINING WALL HEIGHT VARIES FROM 5'-0" TO 0'-4" (SEE DETAIL THIS SHEET) 66+71.64 TO 66+99.15
2'-0" RETAINING WALL (SEE DETAIL SHEET G-2) 65+74.83 TO 66+50.00
66+50, 28.64' LT END 2'-0" TCH=68.66, TW=70.68
TOP OF NEW CHANNEL LINING
67+01.69, 28.99' LT 108" STORMDRAIN OUTFALL 197.5'@ 0% STORMDRAIN DIVERSION (SEE BL7-1)
DRAINAGE RUNDOWN
TRANSITION WALL 3'-8" TO 2'-0"
67+16.18, 28.39' LT ELEV.=74.06
RETAINING WALL (SEE DETAIL SHEET G-2) 67+05.80 TO 68+50.00
INVERT OF NEW CHANNEL LINING
108" RCP
S78°51'52"E
S89°39'49"E 71.64'
N79°32'31"W 46.57'
S=1.86%
S=1.79%
S=1.66%
SLOPE VARIES
2:1 SLOPE
67.80
60.11
60.84
61.03
61.22
61.41
61.60
61.79
61.80
61.93
66.06
66.00
67.00
74.43
74.97
73.92
74.47
74.60
73.80
73.93
74.60
5.63'
10'
7.85'
3.19'
15.00'
6.19'
25.00'
5.0'
2.46'
4.37'
5.58'
4.76'
3.73'
3.30'
16.44'
2.14'
1.84'
14.41'
1.83'
13.13'
1.27'
10.85'
1.43'
8.59'
1.55'
9.34'
1.32'
4.03'
1.92'
9.18'
2.51'
3.52'
2.68'
62.77
61.37
66+11.45, 6.00' LT ELEV=60.11
66+37.51, 6.00' LT ELEV=60.85
66+55.53, 6.00' LT ELEV=61.04
66+75, 6.00' LT ELEV=61.44
67+05.80, 21.48' LT TCH=69.92, TW=71.92
67+10.69, 21.71' LT ELEV=74.37
67+05.80, 21.48' LT TCH=69.93, TW=73.50
67+05.11, 21.12' LT TW=73.52
67+01.69, 28.99' LT INV=61.93 TW=72.85
67+03.52, 28.51' LT FL=73.28
67+05.11, 21.12' LT TW=73.52 FL=72.85
67+05.80, 21.48' LT ELEV=61.97
ELEV=62.09
ELEV=60.37
ELEV=62.62
TCH=70.05 TW=72.05
TCH=70.36 TW=72.36
TW=73.52 FL=72.85
FL=61.93
FL=73.30
FL=73.93
FL=74.00
FL=73.80
FL=74.47
FL=74.60
FL=73.93
S=2.85%
S=2.35%
S=2.70%
S=3.13%
S=2.65%
S=2.85%
S=2.85%
S=2.85

RECORD DRAWINGS



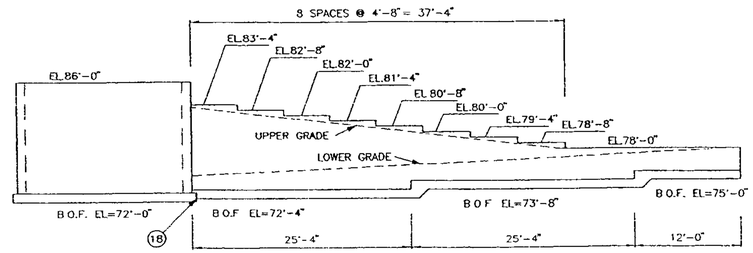
DIVERSION POND PLAN

SCALE: 1/8" = 1'-0"



ELEVATION WALL "A"

SCALE: 1/8" = 1'-0"



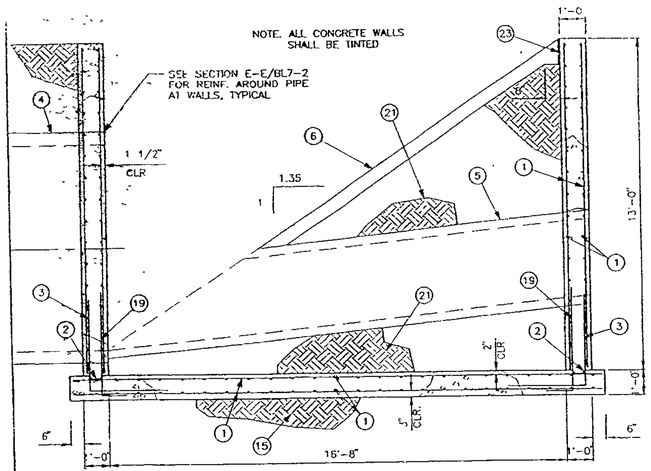
ELEVATION WALL "B"

SCALE: 1/8" = 1'-0"

KEYED NOTES

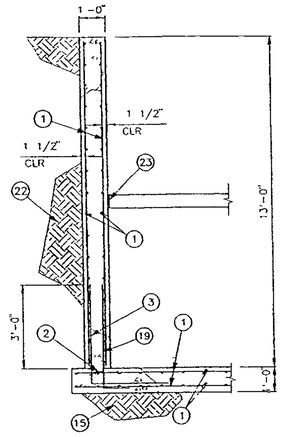
1. #5 AT 16" O.C., TYPICAL U.N.O.
2. 2x6 BEVELED KEY CONTINUOUS
3. #5 DOWELS TO MATCH SPACING OF VERTICAL WALL REINF
4. 96" RCP PIPE
5. 36" RCP PIPE
6. 6" TINTED SLOPE PAVING
7. K.O.B.B WITH (1)- #5 AT TOP OF WALL
8. #5 AT 16" O.C VERTICAL
9. DUR-O-WAL #12 JOINT REINFORCING AT 16" O.C. HORZ
10. #5 AT 16" O.C
11. 12" CMU
12. TYPICAL WALL REINFORCING
13. #5 AT 10" O.C CORNER BARS (36" / 36")
14. Z BAR TO MATCH CONTINUOUS REINFORCING SIZE AND SPACING (USE 1'-6" LEGS)
15. 12" SUBGRADE PREP. COMPACT TO 95% ASTM D-1557
16. SEE DETAIL "4" THIS SHEET FOR TYPICAL REINFORCING AT CORNERS
17. SEE DETAIL "5", THIS SHEET FOR DOWEL CONNECTION AT CONCRETE TO CMU WALL TRANSITION
18. FORM CMU WALL FOOTING AROUND 6" EXTENSION OF CONCRETE BOX. DOWEL CMU WALL FOOTING INTO 6" EXTENSION USING (5) - #5 x 2'-0" DOWELS LOCATED 4" FROM TOP OF EXTENSION AND EQUALLY SPACED HORIZONTALLY
19. #5 AT 10" O.C. WITH 12" STANDARD HOOK
20. TRIM BARS AS REQUIRED TO FIT AROUND CONCRETE PIPES
21. BACKFILL COMPACTED TO 95% ASTM D-1557
22. BACKFILL COMPACTED TO 90% ASTM D-1557
23. 3/4" EXPANSION JOINT, SEE DETAIL SHEET G-1
24. #5 X 3'-0" DOWELS AT 1'-6" O.C. CENTER DOWELS IN WALL
25. 1/2" EXPANSION JOINT MATERIAL
26. CARDBOARD SLEEVE ON ONE SIDE
27. CONCRETE WALL

VOID



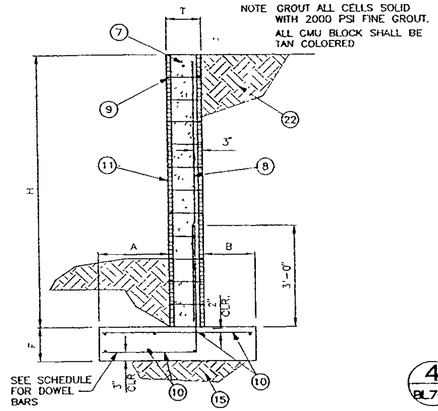
1 WALL SECTION

BL7-4 SCALE: 3/8"=1'-0"



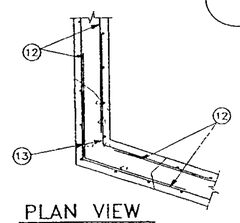
2 WALL SECTION

BL7-4 SCALE: 3/8"=1'-0"



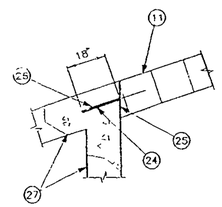
3 WALL SECTION

BL7-4 SCALE: 1/2"=1'-0"



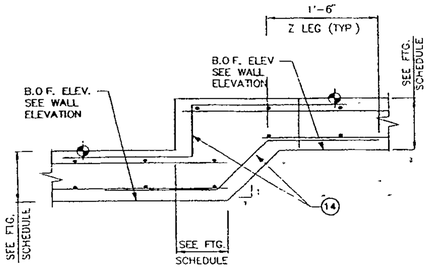
4 REINFORCING @ CORNERS

BL7-4 SCALE: NO SCALE



5 DOWEL REINF. DETAIL

BL7-4 SCALE: NO SCALE



6 STEP FOOTING DETAIL

BL7-4 SCALE: 1"=1'-0"

CMU WALL SCHEDULE

"H"	"T"	"A"	"B"	"F"	DOWEL BARS
2'-0" TO 4'-0"	12"	6"	6"	1'-0"	#5 @ 16" O.C.
4'-8" TO 6'-0"	12"	1'-0"	1'-0"	1'-0"	#5 @ 16" O.C.
6'-8" TO 8'-0"	12"	2'-0"	1'-6"	1'-0"	#5 @ 16" O.C.
8'-8" TO 10'-0"	12"	2'-6"	2'-6"	1'-0"	#6 @ 8" O.C.

AS BUILT INFORMATION
CONTRACTOR MARC CONSTRUCTORS DATE 6/30
WORK STARTED ON: 3/26/02 DATE 4/30
WORK COMPLETED ON: 5/16/02 DATE 4/30
VERIFICATION BY SURVEYOR: SANTOS DATE 6/30
SURVEYING & INSPECTION PERFORMED BY: SANTOS & ASSOCIATES, INC.
RECORD DRAWINGS BY: MARC CONSTRUCTORS DATE 6/30

BENCH MARKS
1-B20 THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR. GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE., THE STA. IS LOCATED IN THE N.E QUADRANT. STATION MARK IS A STANDARD ACE BRASS TABLET, STAMPED 1-B20 X = 410,237.56, Y = 1,524,092.46, G-G = .99984740 DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927) ELEVATION = 5474.310' (SLD 1929)

SURVEY INFORMATION
FIELD NOTES

NO.	DATE	BY

MICRO-FILM INFORMATION

NO.	DATE	RECORDED BY

ENGINEER'S SEAL

REMARKS
REVISIONS

NO.	DATE	DESIGN
		DESIGNED BY JPG 3/18/02
		DRAWN BY TEP 3/18/02
		CHECKED BY AM 3/18/02

101533
CMI, Inc.
Mechanical / Electrical / Structural Consulting Engineers
6400 Uptown Boulevard N.E. Suite 505E (505) 884-8868
Albuquerque, New Mexico 87110 FAX 884-7048

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

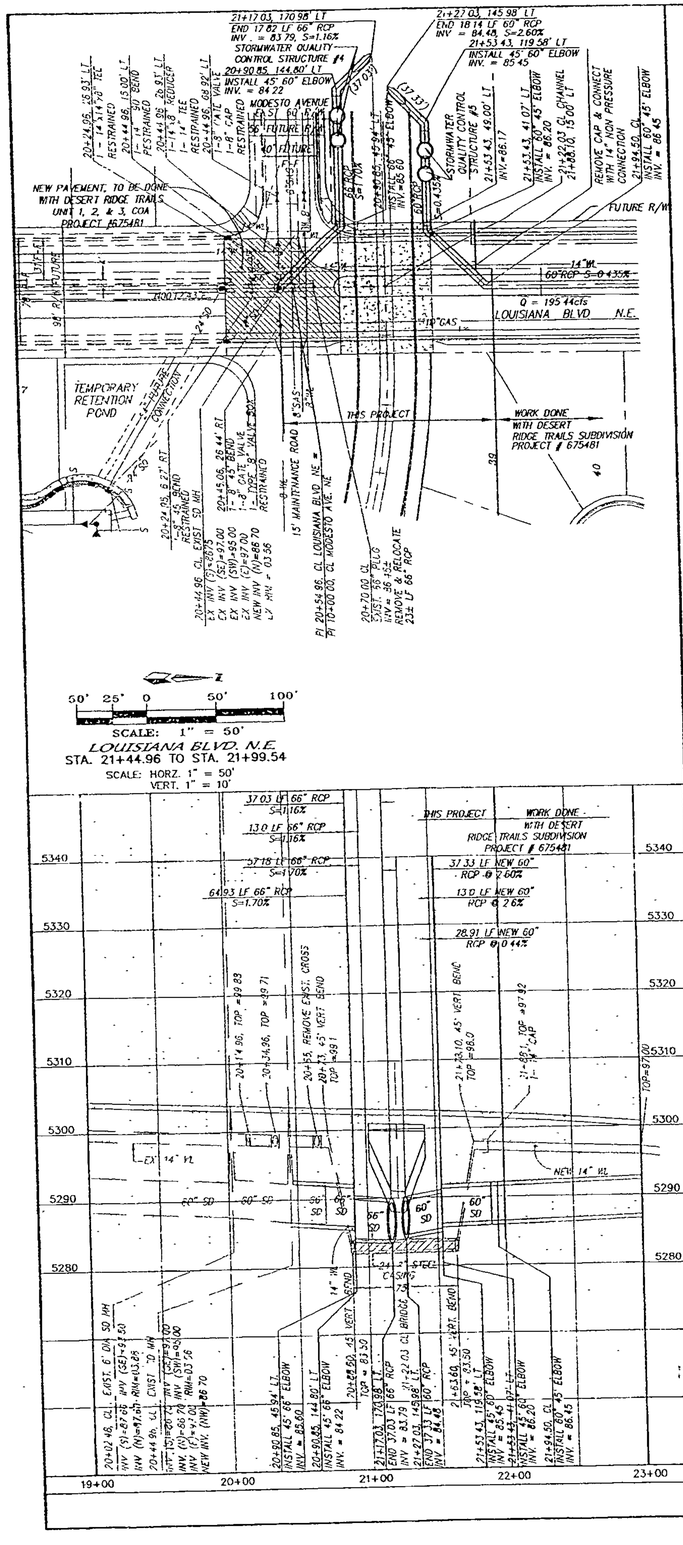
BID LOT 7
EL CAMINO DIVERSION STORMDRAIN

TITLE: DIVERSION POND PLAN AND DETAILS

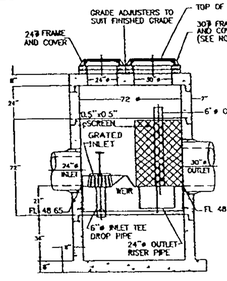
DESIGN REVIEW COMMITTEE — SEP 12 2002 — DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL — SEP 12 2002 — CITY ENGINEER
LAST DESIGN UPDATE — MO./DAY/YR. —
MO./DAY/YR.

CITY PROJECT NO. 677181
ZONE MAP NO C-19-Z
SHEET OF BL7- 4

RECORD DRAWINGS

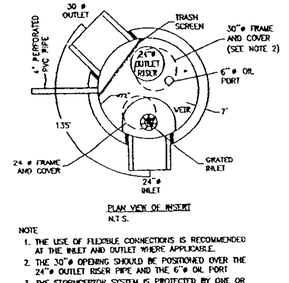


STC 900 Precast Concrete Stormceptor w/Trash Rack
(900 US Gallon Capacity)



SECTION THRU CHAMBER
N.T.S.

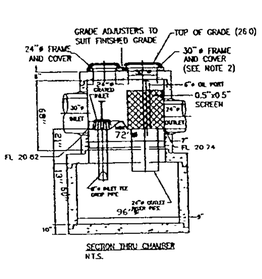
STORMWATER QUALITY CONTROL STRUCTURE #1
PROJECT LA CUEVA ARROYO REACH 3
LOCATION ALBUQUERQUE, NEW MEXICO



PLAN VIEW OF INSERT
N.T.S.

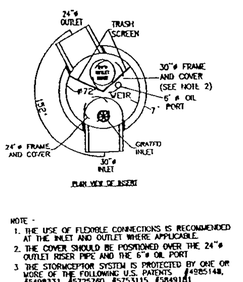
NOTE
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
2. THE 30" ø OPENING SHOULD BE POSITIONED OVER THE 24" ø OUTLET RISER PIPE AND THE 6" ø OIL PORT
3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181
4. CONTRACTOR TO PROVIDE CRANE TO SET THE UNIT (HEAVIEST SECTION WEIGHS 5.9 TONS)

STC 2400t Precast Concrete Stormceptor
(2400 US Gallon Capacity)



SECTION THRU CHAMBER
N.T.S.

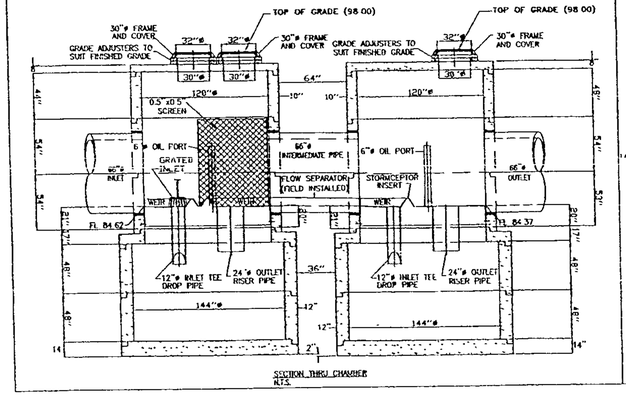
STORMWATER QUALITY CONTROL STRUCTURE #2
PROJECT LA CUEVA ARROYO REACH 3
LOCATION ALBUQUERQUE, NEW MEXICO



PLAN VIEW OF INSERT

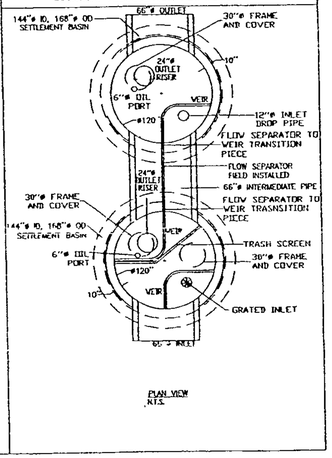
NOTE
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
2. THE COVER SHOULD BE POSITIONED OVER THE 24"ø OUTLET RISER PIPE AND THE 6" ø OIL PORT
3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181
4. CONTRACTOR TO PROVIDE A CRANE TO SET THE UNIT (HEAVIEST SECTION WEIGHS 7.8 TONS).

STC 16000S Precast Concrete Stormceptor
(16,000 US Gallon Capacity)
PROJECT LA CUEVA ARROYO REACH 3 STRUCTURE #4
LOCATION ALBUQUERQUE, NEW MEXICO



SECTION THRU CHAMBER
N.T.S.

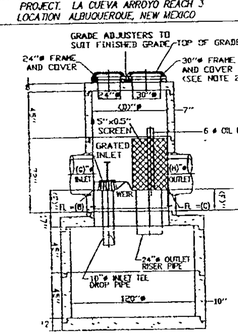
STORMWATER QUALITY CONTROL STRUCTURE #4
PROJECT LA CUEVA ARROYO REACH 3
LOCATION ALBUQUERQUE, NEW MEXICO



PLAN VIEW
N.T.S.

STC 4800 Precast Concrete Stormceptor
(4800 US Gallon Capacity)

STORMWATER QUALITY CONTROL STRUCTURE #3 & #6
PROJECT LA CUEVA ARROYO REACH 3
LOCATION ALBUQUERQUE, NEW MEXICO



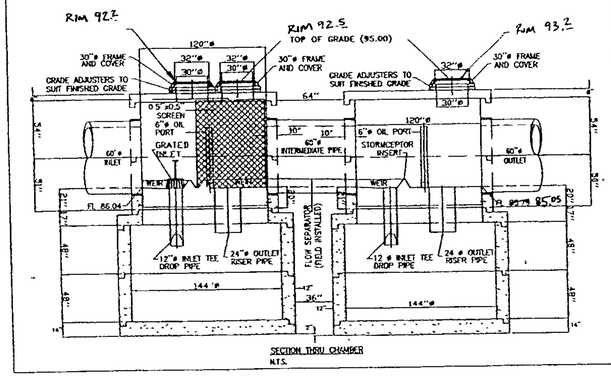
SECTION THRU CHAMBER
N.T.S.

STRUCTURE	A	B	C	D	E	F	G	H	I
RIM ELEV.	PIPE ELEV.	INVERT IN	INVERT OUT	PIPE DIA	DIA.	DIA.	INLET	OUTLET	ANGLE
3	83.7	1114	1106	72"ø	21'	20'	30"ø	54"ø	142°
6	108	05.05	04.89	96"ø	21'	18'	54"ø	54"ø	136°

PLAN VIEW OF INSERT
N.T.S.

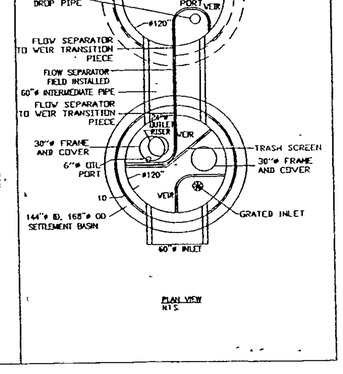
NOTE
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET (STRUCTURE #3)
2. THE USE OF NON-SHRINK GROUT IS REQUIRED AT THE INLET AND OUTLET (STRUCTURE #6)
3. THE COVER SHOULD BE POSITIONED OVER THE 24"ø OUTLET RISER PIPE AND THE 6" ø OIL PORT
4. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181
5. CONTRACTOR TO PROVIDE CRANE TO SET THE UNIT (HEAVIEST SECTION WEIGHS 8.0 TONS).

STC 16000S Precast Concrete Stormceptor
(16,000 US Gallon Capacity)
PROJECT LA CUEVA ARROYO REACH 3 STRUCTURE #5
LOCATION ALBUQUERQUE, NEW MEXICO



SECTION THRU CHAMBER
N.T.S.

STORMWATER QUALITY CONTROL STRUCTURE #5
PROJECT LA CUEVA ARROYO REACH 3
LOCATION ALBUQUERQUE, NEW MEXICO



PLAN VIEW
N.T.S.

NOTE:
STORMCEPTOR UNITS WERE NOT USED ON THIS PROJECT.

AS BUILT INFORMATION
CONTRACTOR MIKE'S CEMENT CONTRACTORS
STAKED BY ENGINEER DATE 4/10
INSPECTORS BHE DATE 4/10
FIELD SURVEY BY ENGINEER DATE 4/30
REVISIONS DATE
RECORDED BY DATE

SURVEY INFORMATION
FIELD NOTES BY NO DATE

BENCH MARKS
"J-810" THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE, TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR. GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N'E QUADRANT
STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "J-810", X = 410,237.56, Y = 1,524,092.46, C-F = 99984740
DELTA ALPHA = 0°40'23", CENTRAL ZONE, (NAD 1927)
ELEVATION = 5474.510 (SLD 1929)

ENGINEER'S SEAL
NEW MEXICO REGISTERED PROFESSIONAL ENGINEER

NO	DATE	REMARKS	BY
		REVISIONS	
	01/02	DESIGN	N. BALDWIN
	01/02	DRAWN BY	N. BALDWIN
	01/02	CHECKED BY	
		DESIGNED BY	

Stormceptor® Hydro Conduit

dmg MARK GOODWIN & ASSOCIATES, P A
CONSULTING ENGINEERS
P O BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

BID LOT 8
STORMWATER QUALITY CONTROL STRUCTURES

TITLE
GENERAL DETAILS

DESIGN REVIEW COMMITTEE
APPROVED
SEP 12 2002
DESIGN REVIEW COMMITTEE

APPROVED
SEP 12 2002
CITY ENGINEER

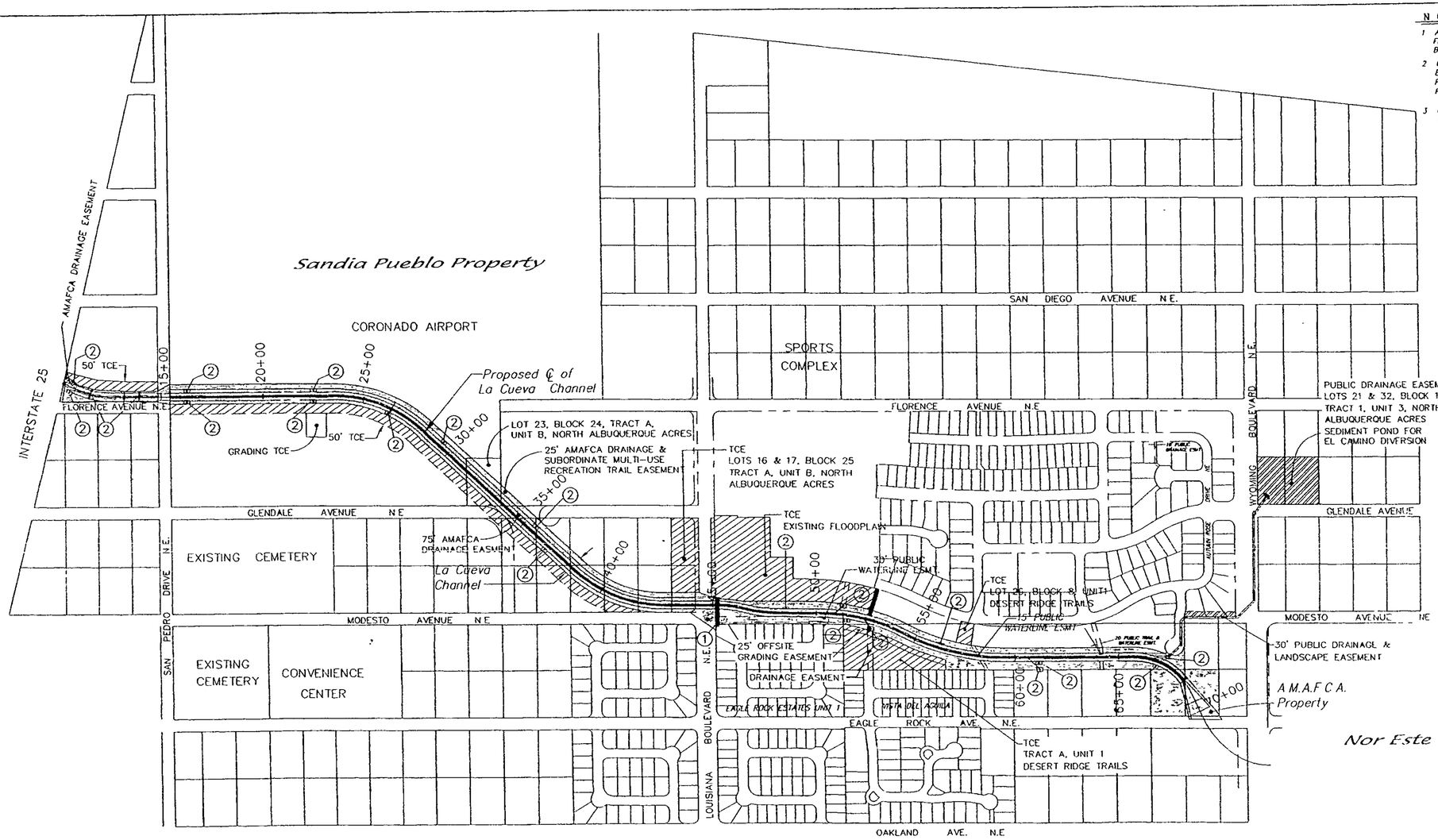
LAST DESIGN UPDATE

NO. DATE	BY

CITY PROJECT NO. 677181
ZONE MAP NO C-19-Z
SHEET BL8-1

A0129WP/CHANNEL/BL8-1A.DWG/04-11-02/ GJK MJR NHM RDO

F:\A00\sets\A0129WP\CHANNEL\BL8-1A.dwg Thu Apr 11 13:52:16 2002 by dan



NOTES

1. ALL WORK MUST BE CONDUCTED WITHIN THE AREA FENCED AND FLAGGED BETWEEN I-25 AND LOUISIANA BOULEVARD.
2. CONTRACTOR SHALL MAINTAIN SILT FENCE THAT HAS BEEN INSTALLED ALONG THE PROJECT BETWEEN SAN PEDRO AND LOUISIANA FOR THE DURATION OF THE PROJECT
3. CONTRACTOR SHALL INSTALL SILT FENCE AS DIRECTED BY THE PROJECT MANAGER

KEYED NOTES

(1) SILT FENCING FOR DURATION OF PROJECT

(2) STRAW BALES, AS SHOWN ON CONSTRUCTION PLANS

LEGEND

- CHANNEL RIGHT-OF-WAY
- PUBLIC DRAINAGE EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT (TCE)

N

300' 150' 0 300' 600'

SCALE: 1" = 300'

AS BUILT INFORMATION

CONTRACTOR MARK I QUART CONTRACTORS

WORK STARTED BY: CARTESIAN SURVEYS INC DATE 6/03

ACCEPTANCE BY: BHE DATE 6/03

VERIFICATION BY: CARTESIAN SURVEYS INC DATE 6/03

DRAWINGS CORRECTED AS-BUILT TO: DATE

MICRO-FILM INFORMATION

RECORDED BY DATE

NO

BENCH MARKS

"1-B20", THE STATION IS LOCATED 9 MILES N.E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST.; THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA IS LOCATED IN THE N.E. QUADRANT STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "1-B20". X = 410,237.56, Y = 1,524,092.46, G-C = 0.9996740

DELTA ALPHA = 0°02'31", CENTRAL ZONE, (NAD 1927)

ELEVATION = 5474.510' (SEA LEVEL DATUM OF 1929)

SURVEY INFORMATION

FIELD NOTES BY DATE

ENGINEER'S SEAL

REMARKS

REVISIONS

DESIGN BY DATE

DESIGNED BY GJC 03/02

DRAWN BY RDQ 03/02

CHECKED BY DMG 03/03

dmg MARY GOODWIN & ASSOCIATES P.A. CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200 FAX (505) 797-9539

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

LA CUEVA ARROYO

TITLE: EROSION AND SEDIMENT CONTROL PLAN

APPROVED SEP 12 2002 DESIGN ENGINEER

APPROVED SEP 12 2002 CITY ENGINEER

LAST DESIGN UPDATE MO/DAY/YR MO/DAY/YR

CITY PROJECT NO 677181

ZONE MAP NO C-19-Z

SHEET OF 51 49A 49

A0129WP/CHANNEL/A0129SWPPP3.DWG,04/12/02 RDQ

F:\A0129\A0129Swppp1.dwg\03-20-02\RDO

CITY PROJECT NO 677181 | SHEET NO C-19-Z | SHEET OF 47 498 49

DESIGN ENGINEER CERTIFICATE — APPROVED SEP 12 2002

DESIGN REVIEW COMMITTEE — APPROVED SEP 12 2002

CITY ENGINEER

LAST DESIGN UPDATE

NO | DATE | REVISIONS | BY

EROSION AND SEDIMENT CONTROL PLAN

LA CUEVA ARROYO

ARROYO FLOOD CONTROL AUTHORITY

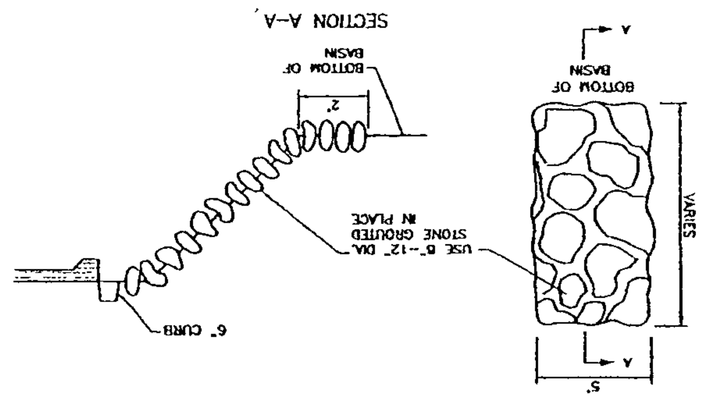
ALBUQUERQUE METROPOLITAN

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

DESIGNED BY
DRAWN BY
CHECKED BY

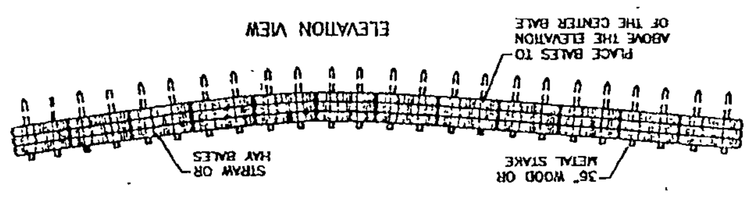
RIP-RAP DETAIL

N.T.S



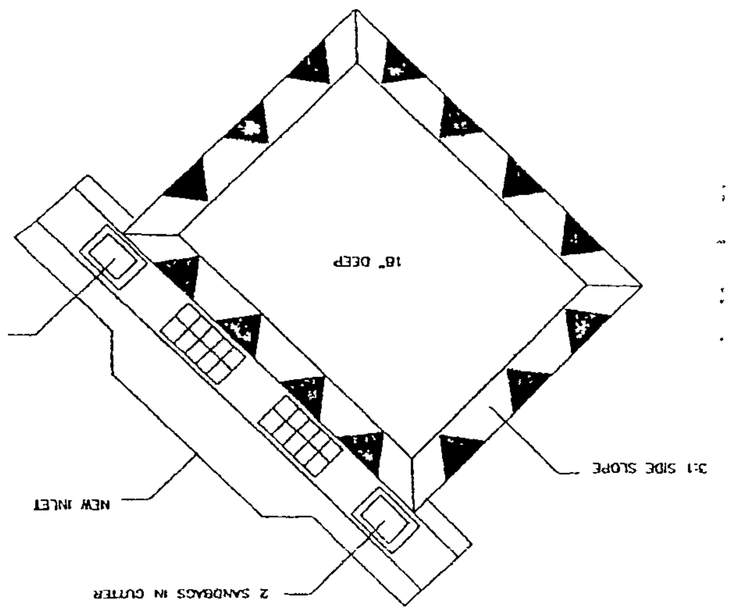
BALE BARRIER (TYPE I) SEDIMENT CONTROL

N.T.S.



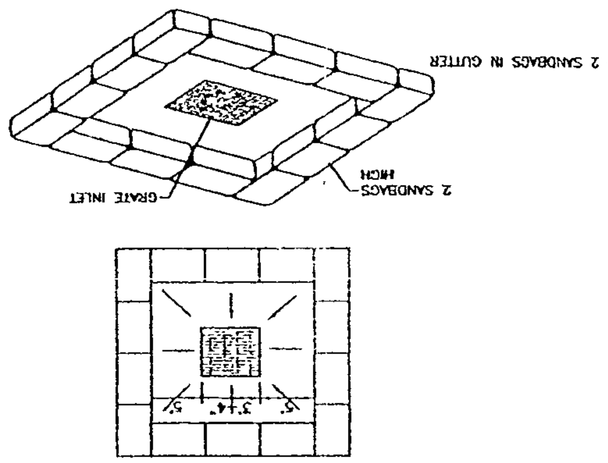
DESILTATION POND DETAIL

N.T.S.



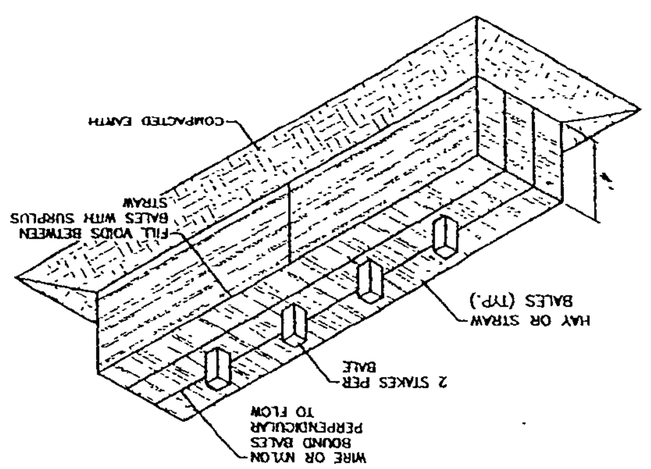
SANDBAG DETAIL

N.T.S



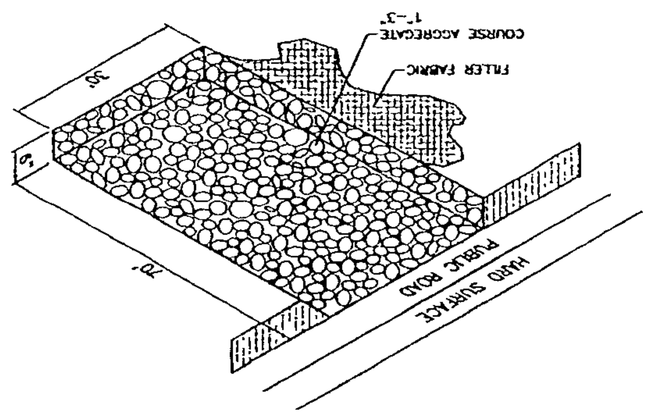
HAY BALE BARRIER

N.T.S.



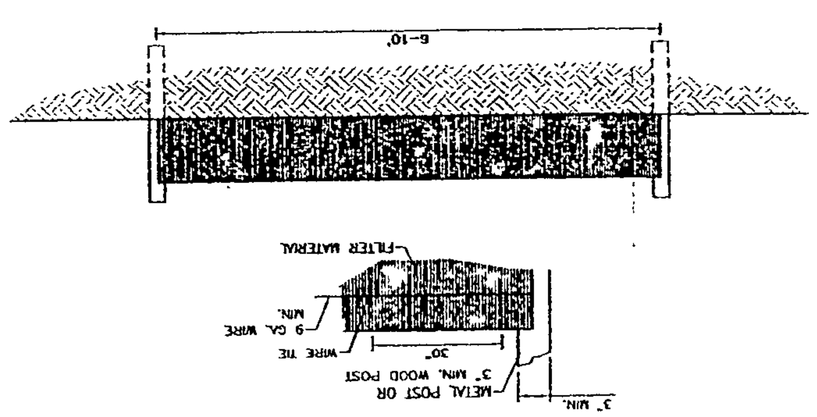
STABILIZED CONSTRUCTION ENTRANCE

N.T.S



SILTATION FENCE FOR SEDIMENT CONTROL

N.T.S



SURVEY INFORMATION

FIELD NOTES BY | DATE

BENCH MARKS

"1-620", THE STATION IS LOCATED 9 MILES N. E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR 1/10 MILE TO BARSTOW ST., THEN NORTH ON BARSTOW ST. 1/10 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT

STATION MARK IS A STANDARD AGS BRASS TABLET, STAMPED "1-620", X = 410,237.56, Y = 1,524,082.46, G-G = .99984740

DELTA ALPHA = 010.23', CENTRAL ZONE, (NAD 1927)

ELEVATION = 5474.510' (SLD 1936)

AS BUILT INFORMATION

CONTRACTOR MARK GOODWIN CONTRACTORS

WORK PERFORMED BY CARTESIAN SURVEYING, INC. DATE 9/03

INSPECTOR'S FIELD CHANGES AND AS-BUILT INFORMATION SUPPLIED BY CARTESIAN SURVEYING, INC. DATE 6/03

SURVEY CONTROL AND AS-BUILT INFORMATION CORRECTED BY CARTESIAN SURVEYING, INC. DATE 6/03

RECORDED BY

MICRO-FILM INFORMATION

DATE

NO

RECORD DRAWINGS

ORM WATER POLLUTION PREVENTION
.AN

c DESCRIPTION

vicinity map on grading plan for location and legal description

2. The first major activities that will disturb the soil will consist of the clearing and grubbing the site After clearing and grubbing are complete the site will be graded The site will consist of both cut and fill areas

3. An Erosion control Plan is included as part of this Storm Water Pollution Prevention Plan All drainage patterns areas of soil disturbance, structural controls. And nonstructural controls will be shown on those plans

SEQUENCE OF CONSTRUCTION

1. Install stabilized construction entrances
2. Construct the silt fences and straw bale barriers as necessary
3 Clear and grub the site
4. Begin grading the site
5. Complete grading and install permanent seeding and planting or surface treatment as approved
6 Remove all temporary erosion and sediment control devices (only if site is stabilized) The site is stabilized when all soil disturbing activities are completed and a landscaped cover for unpaved areas, and areas not covered by permanent structures, has been employed

te The contractor shall be responsible for implementing, restoring and/or using the temporary sediment and erosion control measures (silt fences, straw bale ners, etc) As necessary during construction to help prevent soil erosion and storm ter pollution

SCHEDULED	ACTUAL
ON GOING	

RECORD DRAWINGS

NOTE: NO SUBGRADE, PAVING, CURB & GUTTER STORMDRAIN OR GRADING OF LOUISIANA WILL BE DONE UNTIL THE BRIDGE AND CHANNEL TO I-25 IS FUNCTIONAL. COORDINATE WITH AMAFCA

BEGIN CONSTRUCTION MATCH EXIST. GRADE

MODESTO AVE. NE EXIST 60 R/W

FUTURE R/W

100' AMAFCA R/W

LOUISIANA BOULEVARD N.E.

FUTURE 6' SIDEWALK

FUTURE STANDARD CURB & GUTTER

6' BIKE LANE

6' VALLEY GUTTER

REMOVE & DISPOSE OF 1206 SY ASPHALT

NEW STANDARD CURB & GUTTER

NEW 6' SIDEWALK

4" YELLOW 10' - 30' SKIP STRIPING (TAPE)

NEW 6" SOLID WHITE STRIPE (PLASTIC)

4" SOLID YELLOW DRIPE (PAINT)

PAVEMENT TRANSITION 4" TEMPORARY PAVEMENT PER COA STD DWG 2415

FLORENCE AVENUE NE

SEE SHEET 8

6" YELLOW SOLID STRIPED ISLAND WITH YELLOW 6" CHEVRON (TAPE) BY OTHERS

NEW 6' SIDEWALK BY OTHERS

AMAFCA COMST. PER COA PROJ. # 677181

THIS PROJECT

AMAFCA R/W

10' ASPHALT TRAIL

15' DRIVEWAY

UNIT 3

UNIT 2

BLOCK 8

30' PUBLIC SAN SEWER, DRAINAGE & PEDESTRIAN ACCESS EASEMENT

15' PUBLIC WATERLINE EASEMENT

INSTALL 31.25 LF "M" BEAM GUARD RAIL PER STANDARD DETAIL #2610

INSTALL 12'0 PIPE GATE PER STANDARD DETAIL #2511 W/ 6" STEEL POSTS

INSTALL 250 LF CHAIN LINK FENCE PER STANDARD DETAIL #2540

INSTALL 2 EA ANCHOR PER COA STANDARD DETAIL #2427

PROFILE AT R/W

NTS

SECTION A-A

NTS

15' DRIVEWAY/SIDEWALK DETAIL

DRIVEPAD PER COA STD DETAIL 2425

SIDEWALK PER COA STD DETAIL 2430

PLAN

NTS

SCALE: 1" = 50'

LOUISIANA BLVD. N.E.

STA. 20+55.43 TO STA. 33+50.00

SCALE HORZ 1" = 50'

VERT 1" = 10'

LEGEND

FL ELEV

1	92.60
2	92.73
3	92.85

FL ELEV

1	90.45
2	91.04
3	90.60

FL ELEV

1	94.19
2	93.98
3	93.73

FL ELEV

1	94.08
2	93.47
3	94.36

FL ELEV

1	92.22
2	91.94
3	91.30

FL ELEV

1	91.05
2	90.76
3	90.46

FL ELEV

1	92.64
2	92.35
3	92.05

NOTES

1. ALL STATIONING IS CENTERLINE STATIONING

CURVE DATA - DESCRIBES FACE OF CURB

① Δ = 90°05'03" R = 29.00' L = 45.60' T = 29.04'

② Δ = 180°00'00" R = 8.00' L = 25.13' T = N/A

③ Δ = 16°15'37" R = 150.00' L = 42.57' T = 21.43'

④ Δ = 16°15'37" R = 150.00' L = 42.57' T = 21.43'

⑤ Δ = 180°00'00" R = 2.00' L = 6.28' T = N/A

⑥ Δ = 89°50'45" R = 30.00' L = 47.04' T = 29.92'

⑦ Δ = 90°09'15" R = 30.00' L = 47.20' T = 30.08'

⑧ Δ = 180°00'00" R = 8.00' L = 25.13' T = N/A

⑨ Δ = 16°15'37" R = 150.00' L = 42.57' T = 21.43'

⑩ Δ = 16°15'37" R = 150.00' L = 42.57' T = 21.43'

⑪ Δ = 90°10'11" R = 30.00' L = 47.21' T = 30.09'

⑫ Δ = 89°54'58" R = 30.00' L = 47.08' T = 29.96'

⑬ Δ = 90°05'02" R = 30.00' L = 47.17' T = 30.04'

⑭ Δ = 89°49'49" R = 30.00' L = 47.04' T = 29.91'

⑮ Δ = 180°00'00" R = 2.00' L = 6.28' T = N/A

⑯ Δ = 84°38'58" R = 25.00' T = 22.77' L = 36.94'

⑰ Δ = 152°43'39" R = 8.00' T = 32.98' L = 21.32'

⑱ Δ = 32°37'23" R = 50.00' T = 14.63' L = 28.47'

⑲ Δ = 174°38'58" R = 2.00' T = 42.80' L = 6.10'

AS BUILT INFORMATION

CONTRACTOR mark + robert contractors DATE 7/03

WORK SUBSTANTIALLY COMPLETED DATE 7/03

ACCEPTANCE BY CITY OF ALBUQUERQUE DATE 7/03

CERTIFICATION BY SURVEYOR DATE 8/03

SURVEYOR'S CERTIFICATE: I, WILL PLOTNER JR, A DULY QUALIFIED, REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO DO HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND AS-BUILT SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION AND THAT THIS AS BUILT INFORMATION IS TRUE AND CORRECT TO THE BEST OF KNOWLEDGE AND BELIEF. CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS CALCULATIONS, ENGINEERING, OR INTENT OF THE RECORD DRAWINGS

WILL PLOTNER JR, PLS# 14271

MICRO-FILM INFORMATION

RECORDED BY

DATE

NO

BENCH MARKS

"1-B20", THE STATION IS LOCATED 9 MILES N.E. OF DOWNTOWN ALBUQUERQUE. TO REACH THE STATION FROM THE INTERSECTION OF LOUISIANA BLVD. AND LOS ANGELES DR., GO EAST ON LOS ANGELES DR. 1.0 MILE TO BARSTOW ST.; THEN NORTH ON BARSTOW ST. 1.0 MILE TO MODESTO AVE. THE STA. IS LOCATED IN THE N.E. QUADRANT

STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED

"1-B20", X = 410,237.36, Y = 1,524,092.46, P-G = 99961740

DELTA ALPHA = 0°10'23", CENTRAL ZONE, (NAD 1927)

ELEVATION = 5474.510' (SLD 1929)

SURVEY INFORMATION

FIELD NOTES

NO	BY	DATE

ENGINEER'S SEAL

NEW MEXICO 14271 REGISTERED PROFESSIONAL SURVEYOR

NO	DATE	REMARKS
		REVISIONS
		DESIGN

	BY	DATE
DESIGNED BY	GJK	03/01
DRAWN BY	MJR	03/01
CHECKED BY	DMG	03/01

dmg MARK GOODWIN & ASSOCIATES P.A. CONSULTING ENGINEERS P.O. BOX 90605 ALBUQUERQUE, NEW MEXICO 87199 (505) 828-2200 FAX (505) 797-9539

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT

TITLE: DESERT RIDGE TRAILS - UNITS 1, 2 & 3 LOUISIANA BOULEVARD N.E. PAVING IMPROVEMENTS

APPROVED MAR 13 2002 DESIGN REVIEW COMMITTEE

APPROVED MAR 13 2002 CITY ENGINEER

NO	DATE/BY	NO	DATE/BY

LAST DESIGN UPDATE

CITY PROJECT NO 675481

ZONE MAP NO C-19-Z

SHEET 50 OF 51

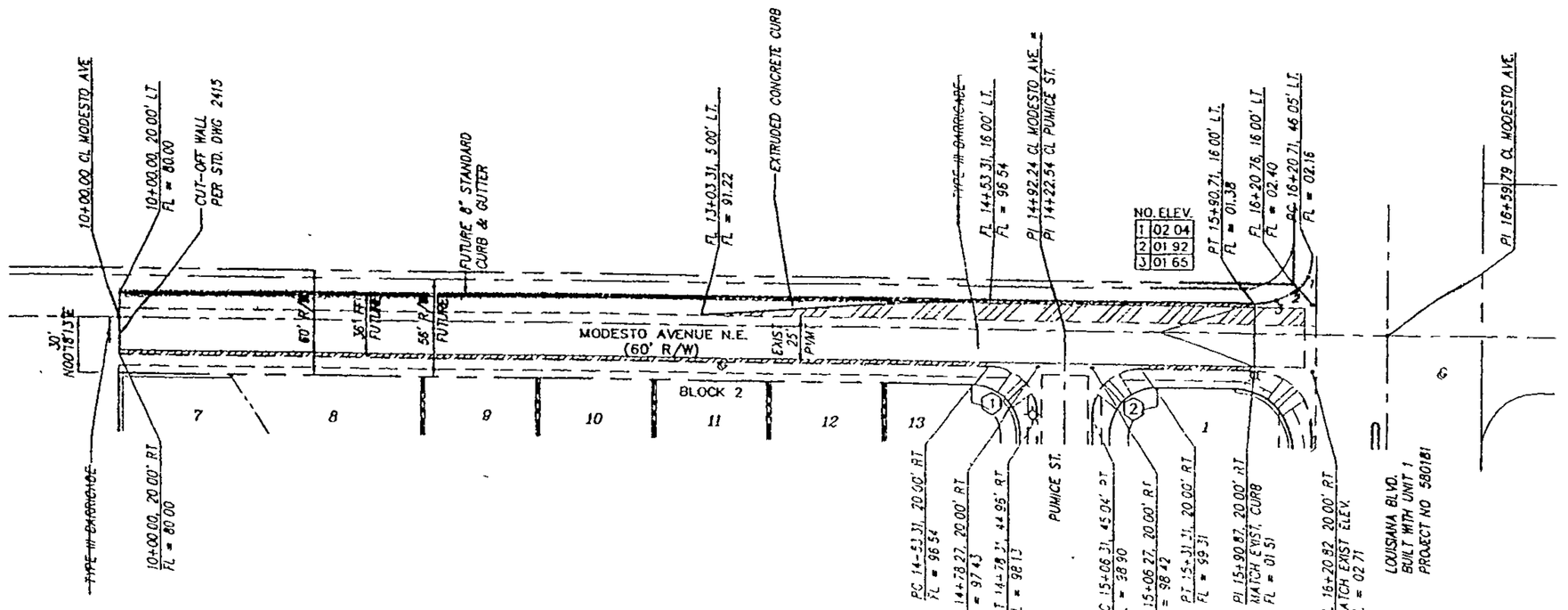
A0129WP\PLANS\LOUISIANA-PP1\02-06-02\ MJR ACH RDO GJK NHM DER

RECORD DRAWINGS

CURVE DATA – DESCRIBES FACE OF NEW CURB

① Δ = 89°54'29" R = 25.00' L = 39.23' T = 24.96'

② Δ = 90°05'31" R = 25.00' L = 39.31' T = 25.04'



SURVEYOR'S CERTIFICATION

I WILL PLOTNER JR, A DULY QUALIFIED REGISTERED, PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE AS BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND AS BUILT SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION THAT THE AS-BUILT INFORMATION SHOWN ON THESE DRAWINGS WAS ACCEPTED BY ME OR UNDER MY SUPERVISION AND THAT THIS AS BUILT INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS CALCULATIONS ENGINEERING OR INTENT OF THE RECORD DRAWINGS

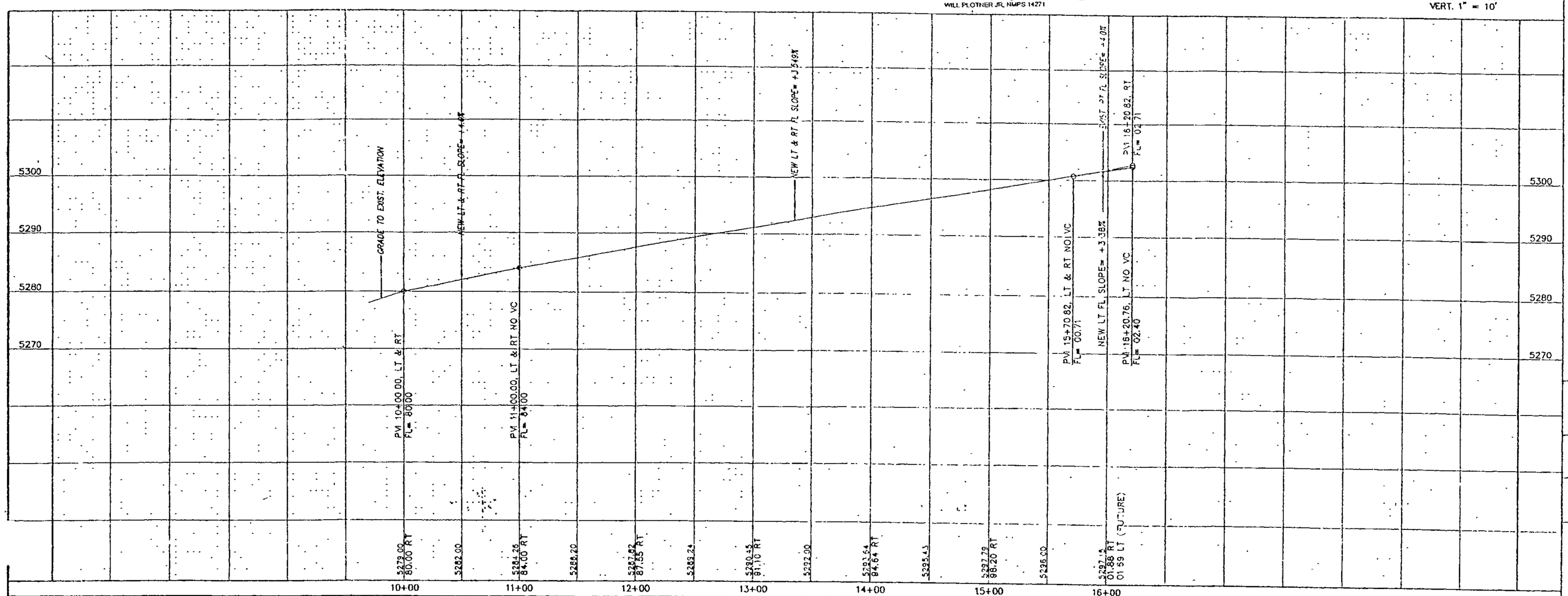
Will Plotner Jr.

WILL PLOTNER JR, NMPS 14271

NEW MEXICO 14271 REGISTERED PROFESSIONAL LAND SURVEYOR

N

MODESTO AVENUE
STA. 10+00.00 TO STA. 16+59.79
SCALE: HORZ 1" = 50'
VERT. 1" = 10'



NOTES

1. ALL STATIONING IS CENTERLINE STATIONING

AS BUILT INFORMATION

CONTRACTOR NAME & CONST. ADMINISTRATOR

WORK STARTED BY: CARTESIAN SURVEYS DATE 7/23

WORK COMPLETED BY: KUKUS ENG. DATE 7/23

ACCEPTANCE BY: BHT DATE

FIELD LOCATION BY: CARTESIAN SURVEYS DATE 7/23

DRAWINGS REVISED BY: KUKUS ENG. DATE

CONSTRUCTION STAKING BY: CARTESIAN SURVEYS DATE

MICRO-FILM INFORMATION

RECORDED BY DATE

BY

BENCH MARKS

STANDARD ACS ALUMINUM CAP STAMPED "14-C18"

X = 494,884.49

Y = 1,523837.39

Z = 5305.00

SURVEY INFORMATION

FIELD NOTES

NO BY DATE

ENGINEER'S SEAL

NEW MEXICO 14271 REGISTERED PROFESSIONAL LAND SURVEYOR

NO	DATE	REVISIONS REMARKS	BY
		DESIGN	
		DESIGNED BY DLH	DATE 03/98
		DRAWN BY DRC, KJS	DATE 03/98
		CHECKED BY DMG	DATE 03/98

dmg MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE
LA CUEVA ARROYO
PAVING IMPROVEMENTS
MODESTO AVENUE

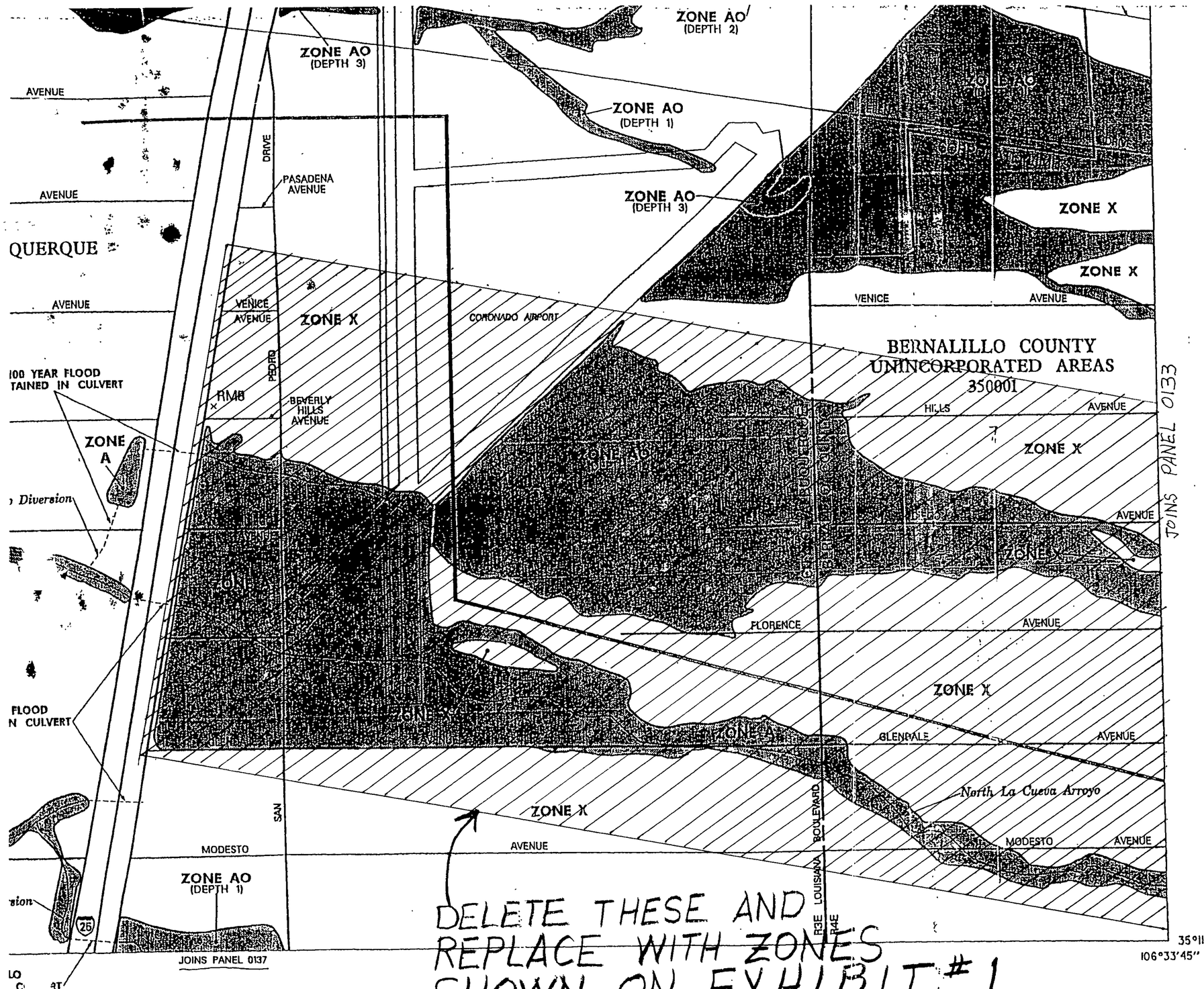
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR	MO./DAY/YR

CITY PROJECT NO 677181

ZONE MAP NO C-18

SHEET 51 OF 51

A0129WP\PLANS\PP-MODE\11-07-02 GJK



DELETE THESE AND
REPLACE WITH ZONES
SHOWN ON EXHIBIT #1

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE DATE shown on this map to determine when actuarial rates apply to structures in zones where elevations or depths have been established.

To determine if flood insurance is available, contact an insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE IN FEET

500 0 500

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

BERNALILLO COUNTY,
NEW MEXICO AND
INCORPORATED AREAS

PANEL 129 OF 825
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

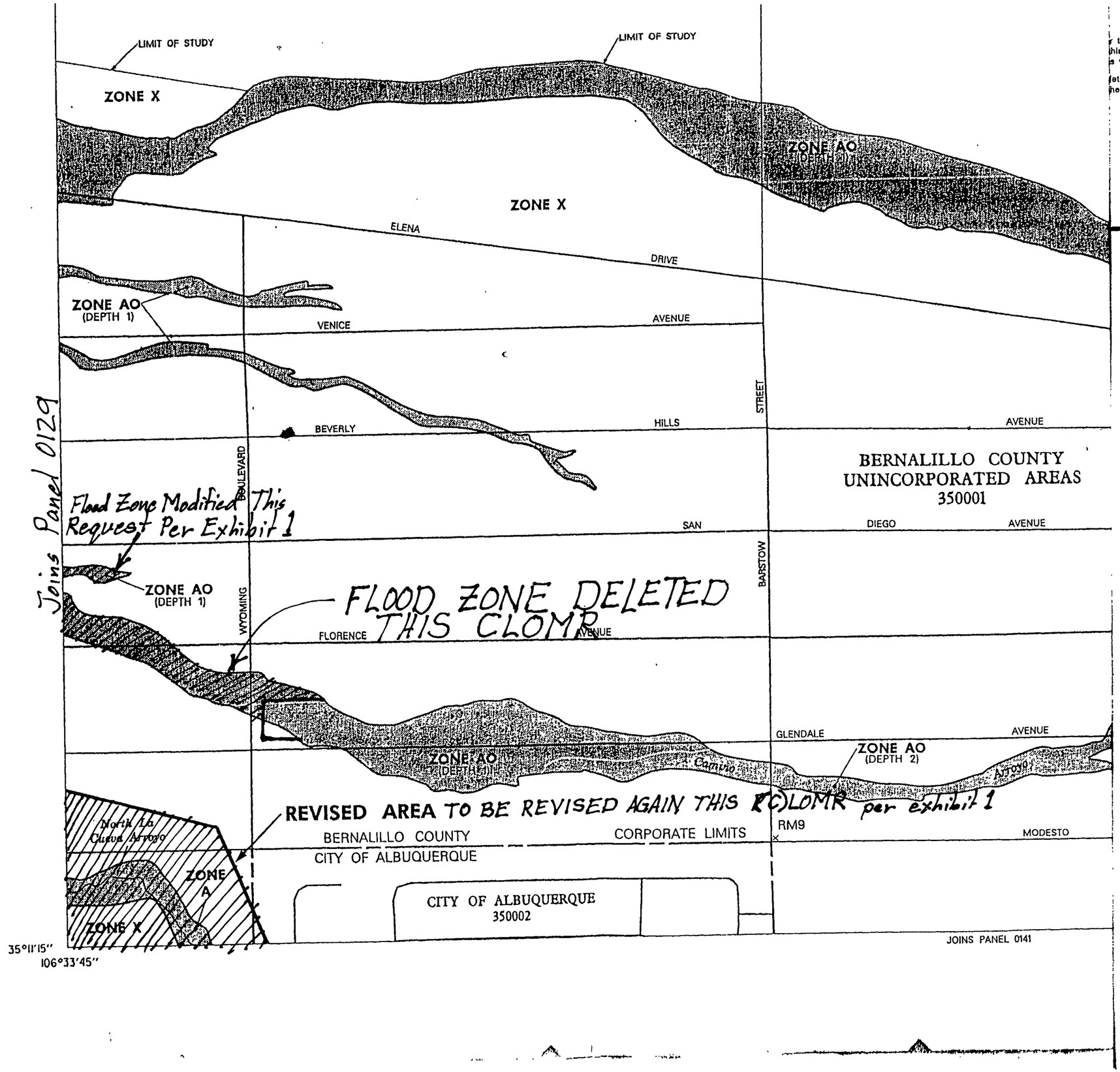
COMMUNITY	NUMBER	PANEL	SUFFIX
ALBUQUERQUE, CITY OF	350002	0129	D
BERNALILLO COUNTY, UNINCORPORATED AREAS	350001	0129	D

REVISED TO
REFLECT LOMR
DATED SEP 11 1998

MAP NUMBER
35001C0129 D

EFFECTIVE DATE:
SEPTEMBER 20, 1996

Federal Emergency Management Agency



to the FLOOD INSURANCE RATE MAP EFFECTIVE DATE shown this map to determine when actuarial rates apply to structures in s where elevations or depths have been established.

determine if flood insurance is available, contact an insurance agent or he National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE IN FEET

600 0 600

BERNALILLO COUNTY
UNINCORPORATED AREAS
350001

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

BERNALILLO COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 133 OF 825
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS: COMMUNITY	NUMBER	PANEL	SUFFIX
ALBUQUERQUE, CITY OF	350002	0133	D
BERNALILLO COUNTY, UNINCORPORATED AREAS	350001	0133	D

REVISED TO REFLECT LOMR DATED SEP 11 1998

MAP NUMBER
35001C0133 D

EFFECTIVE DATE:
SEPTEMBER 20, 1996

Federal Emergency Management Agency

300

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FEET NGVD)	DESCRIPTION OF LOCATION
RM9	5474.53	City of Albuquerque (ACS) standard brass tablet, stamped "1-B20", set in top of a concrete post projecting 0.3', located 20' north of Alameda Avenue, and 20' east of Barstow Street.
RM17	5478.06	City of Albuquerque (ACS) standard brass tablet, stamped "1-C20A" set in top of a concrete post flush with ground, located 5.0' north of the centerline of Los Angeles Avenue and 25.0' east of the centerline of Barstow Street.

PANEL 141 of 825

106°33'45"
35°11'15"

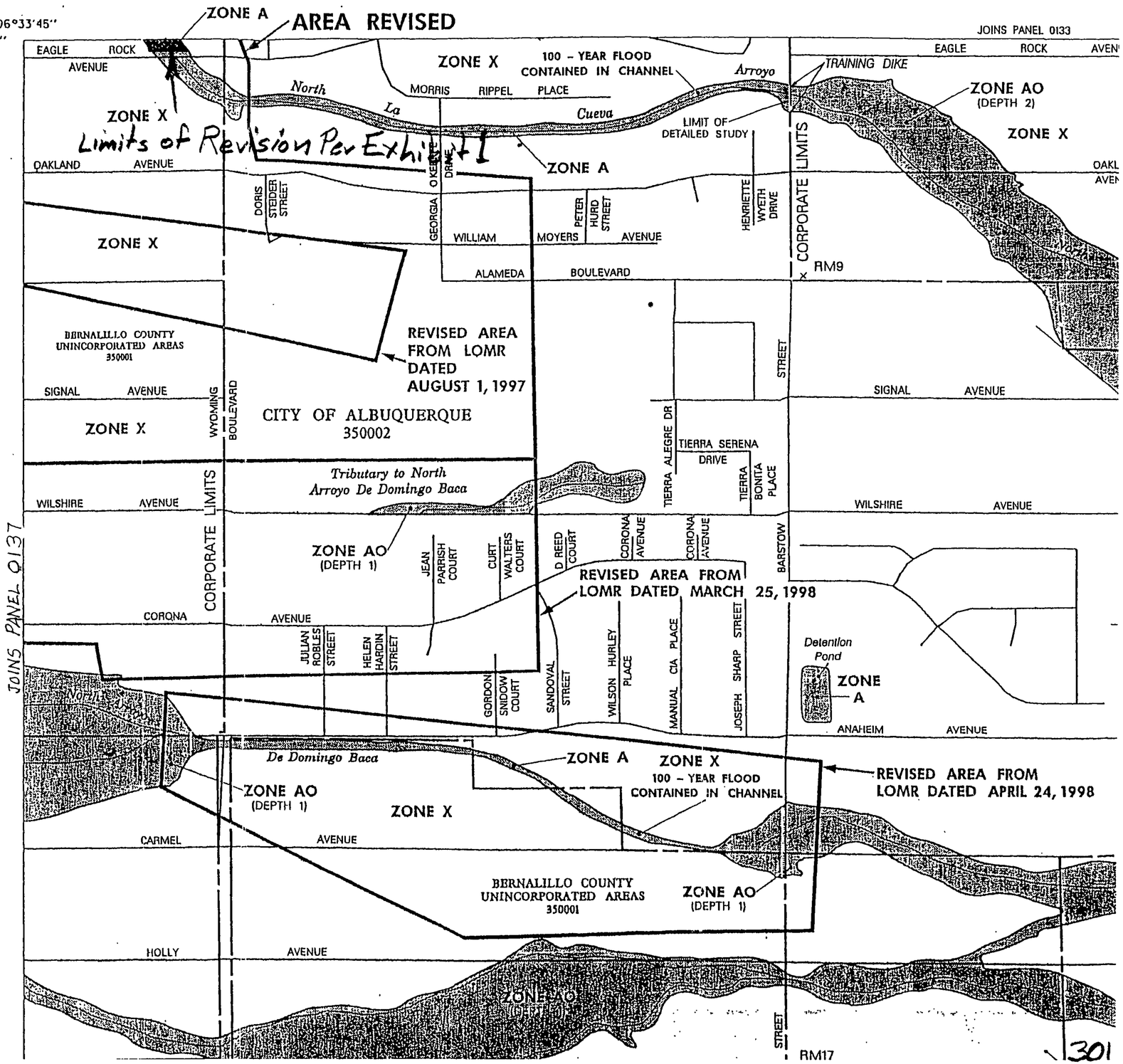
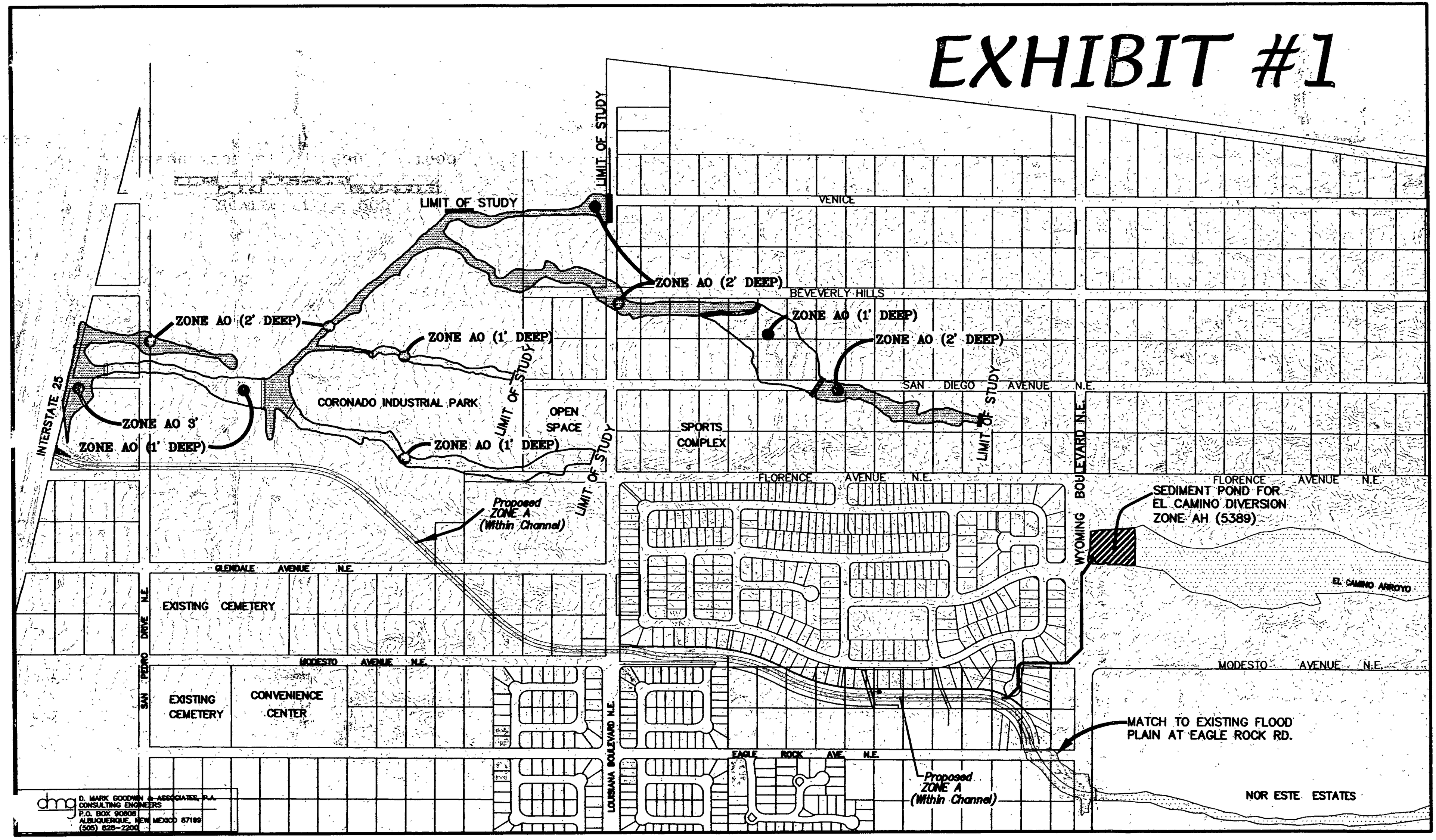


EXHIBIT #1



dmg D. MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200

F:\DOUG\cueva\Zones.dwg Fri Jan 10 10:23:16 2003 D. MARK GOODWIN & ASSOCIATES, PLTTED BY: mike

APPROXIMATE SCALE IN FEET

500 0 500

NFIP PANEL 0129F

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

BERNALILLO COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 129 OF 825

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ALBUQUERQUE, CITY OF	350002	0129	F
BERNALILLO COUNTY, UNINCORPORATED AREAS	350001	0129	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
35001C0129F

MAP REVISED:
NOVEMBER 19, 2003

Federal Emergency Management Agency

REVISED TO REFLECT LOMR DATED APR 16 2004

556

ZONE AO (DEPTH 1)

ZONE AO (DEPTH 3)

ZONE AO (DEPTH 2)

ZONE D BOUNDARY COINCIDENT WITH RESERVATION BOUNDARY

ZONE D

BALBOA AVE NE

PAN AMERICAN FRWY NE

City of Albuquerque 350002

ZONE X

ZONE AO (DEPTH 1)

ZONE AO (DEPTH 2)

ZONE AO (DEPTH 3)

ELENA DR NE

ZONE X

PASADENA AVE NE

SAN MATEO BLVD NE

VENICE AVE NE

1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT

25

LIMIT OF STUDY

ZONE AO (DEPTH 1)

AMRAAM CT NE

BEVERLY HILLS AVE NE

ZONE A

ZONE AO (DEPTH 2)

South El Camino Diversion

SAN DIEGO AVE NE

North La Cuerva Arroyo

1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT

ZONE AO (DEPTH 3)

ZONE AO (DEPTH 1)

ZONE AO (DEPTH 2)

Bernalillo County Unincorporated areas 350001

ZONE X

FLORENCE AVE NE

REVISED AREA

South La Cuerva Arroyo

ZONE A

GLENDALE AVE NE

ZONE AH (EL 5392)

ZONE AO (DEPTH 1)

SAN PEDRO DR NE

LOUISIANA BLVD NE

35001C0129E

35001C0133F

ZONE X

1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT

WYOMING BLVD NE

MODESTO AVE NE

North La Cueva Arroyo

OBSIDIAN ST NE

SCHIST AVE NE

GABBRO AVE NE

JET RD NE

JASPER DR NE

PUMICE ST NE

MOONSTONE DR NE

BLOODSTONE RD NE

R C GORMAN AVE NE

WALTER BAMBROOK PL NE

WILSON HURLEY ST NE

35001C0133F

35001C0141F

MORRIS RIPPEL PL NE

ZONE A

LA CUEVA CHANNEL NE

OAKLAND AVE NE

ZONE X

GEORGIA O KEEFFE DR NE

PETER HURD ST NE

DORIS STEIDER ST NE

WILLIAM MOYERS

ALAMEDA BLVD

APPROXIMATE SCALE IN FEET

500 0 500

NFIP PANEL 0133F

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

BERNALILLO COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 133 OF 825

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ALBUQUERQUE, CITY OF	350002	0133	F
BERNALILLO COUNTY	350001	0133	F

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MAP NUMBER
35001C0133F

MAP REVISED:
NOVEMBER 19, 2003

Federal Emergency Management Agency

REVISED TO REFLECT LOMR DATED APR 16 2004

APPROXIMATE SCALE IN FEET

500 0 500

NFIP PANEL 0141F

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

BERNALILLO COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 141 OF 825

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ALBUQUERQUE, CITY OF	350002	0141	F
BERNALILLO COUNTY	350001	0141	F

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MAP NUMBER
35001C0141F

MAP REVISED:
NOVEMBER 19, 2003

REVISED TO REFLECT LOMR